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The present sequence represents an osteogenic peptide. The peptide
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                          Claim 2; Page 22; 22pp; English
                                                  Novel osteogenetic peptides useful for the treatment and prevention fractures.
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Osteogenic peptide; alkaline phosphatase; osteoblast; neogenetic bone; bone growth; bone fracture; rheumatoid arthritis; osteoporosis; peridontic disease; bone filler; bone substance.
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91US-00621588

91US-00621582
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88US-00232630.
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                                                                                                                                                                                                                                                                                    CORP.
                                                                                                                                                                                                                                         Ozkaynak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cartilage; matrix; osteoarthritis; repair;
sation; differentiation.
                                                                                                                                                                                                                                         'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 111; DB 3;
Pred. No. 9.5e-08;
Mismatches 0;
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                                                                                                                                                                                                                                      Rueger
                                                                                                                                                                                                                                         2,
                                                                                                                                                                                                                                      Pang
                                                                                                                                                                                                                                         RHL,
                                                                                                           cartilage and with a matrix
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This sequence is a fragment of the osteogenic designated OPS (The S is for "Short"). The 97

protein OP1 and is amino acid C-terminal

WPI;

1999-131303/11

Nucleic acid encoding mammalian osteogenic per induce cartilage and bone formation when for repairing bone defects.

proteins in prepro form -implanted in matrix, use

useful

able

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ARWESULT 3

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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                     18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
04-DEC-1990;
04-DEC-1990;
22-FEB-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; osteogenic process. skeletal discretings; craniofacial defect; skeletal discreting for non-union fracture; osteoarthritis; vascularisation; bone marrow differentiation.
                                                                                                                                                           Pang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             region of OP1 which is the functional domain of OP1 is present in this fragment. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis.

(Updated on 01-UUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-AUG-1990;
07-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human osteogenic
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24-MAR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-OCT-1989;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-JAN-1999
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                                                                                                                                                                                                       (STYC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-AUG-1988;
                                                                                                                                                           RHL,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      osteogenic protein; OP-1; OPX; endochondral bone formation; age; craniofacial defect; skeletal disorder; dental disorder;
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                                                                                                                                                                                                         STRYKER
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Similarity 100.0%;
20; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS
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                                                                                                                                                           Rueger DC,
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(first en
                                                                                                                                                                                                                                                                           91US-00810560.
92US-00827052.
92US-00841646.
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90US-00621849.
90US-00621988.
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90US-00600024.
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89US-00422699
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                                                                                                                                                                                                         CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     peptide;
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                                                                                                                                                             Kuberasampath
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Pred. No. 4.3e-07;
Mismatches 0;
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                                                                                                                                                           Oppermann
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                                                                                                                                                             Ħ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mineralisation;
                                                                                                                                                             Ozkaynak
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The present invention describes isolated DNA (I) encoding at least one costeogenically active region of human osteogenic protein-1 in prepro form (OP1-PP), murine OP1-PP, murine OP2-PP chandled to (I) encoding a polypeptide able to form dimers that can induce cartilage and endochondral bone formation in a mammal (C) when implanted in a matrix; (B) vectors containing (I) or related NNA; (C) host cells transformed with this vector; (D) DNA (I') encoding a costeogenic protein (II) produced by expression of transformed mammalian (C) ells, able to induce bone and cartilage formation; (P) mature OP1 (C) secreted from mammalian cells following expression of the sequence that concodes hop1-PP; and (G) production of an active osteogenic composition by truncating mature OP1 protein. Host cells of (C) are used to produce of acquired or congenital craniofacial defects or other skeletal or congenital craniofacial defects or other skeletal or dental disorders; to heal non-union fractures; to repair cartilage, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 10; Col 151; 127pp; English
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Query Match Best Local Matches Sequence 97 20; Similarity PA field.) AA, Conservative 100.0%; <u>.</u> Score 111; DB 2; Pred. No. 4.3e-07; Mismatches 0 Length 97; <u>,</u> Gaps 0

in osteoarthritis, or generally wherever bone formation is required. The proteins induce complete development of endochomdral bone, including vascularisation mineralisation and bone marrow differentiation. The present sequence represents a human OP1 fragment. (Updated on 20-MAR-2003

RESULT 4 AAW95444 맑 55 22 INPETVPKPCCAPTQLNAIS 71

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1 INPETVPKPCCAPTQLNAIS

20

AAW95444 standard; protein; 97 8

AAW95444;

26-MAR-1999 (first entry)

Conserved 6 cysteine skeleton fragment from human OP1

bone morphogenic protein, BMP, growth factor beta superfamily; polycystic kidney disease; multicystic dysplastic kidney disease; uraemic medullary cystic disease; human. Cystic kidney disease; renal; therapeutic; osteogenic protein; OP;

Homo sapiens

WO9850061-A1

12-NOV-1998

06-MAY-1998; 98WO-US009268

07-MAY-1997; 97US-0045909P

(BIOJ) BIOGEN INC

Gjorstrup P, Harris

WPI; 1999-070084/06.

Treating cystic kidney disease - using renal therapeutic agents or sequences encoding them, especially from the osteogenic protein/bone morphogenic protein family.

The protein is capable of inducing endochronal bone formation in association with a biocompatible, in vivo biodegradable matrix. The protein is produced by expression of the recombinant DNA in a host cell and comprises more than one polypeptide chain, with an amino acid sequence sufficiently duplicative of COP5, COP1, COP1, or OP1. The protein and the implantable devices enable optimal predictable bone formation. Clinical applications include correction of acquired and congenital craniofacial and other skeletal or dental anomalies, induction

Claim 3; Page 5-6; 67pp; English

relates to methods for treating cystic kidney diseases.

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RESULT 5
AAP95681
ID AAP9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cc method comprises administering an effective amount of a renal therapeutic agent or a polymucleotide encoding the therapeutic agent. The therapeutic agent is preferably a soluble or membrane bound polypeptide, e.g. a cc member of the osteogenic protein/bone morphogenic protein (Op/BMP) family comembrane in transforming growth factor-beta superfamily of proteins. It is cespecially one of the polypeptides hop1, hop1-pp, Op1-18Ser, Op5, Op7, CC Op1-16Ser, Op1-16Leu, Op1-16Met, Op1-16Ala, Op1-16Val, mop1, mop1-pp, CP1-16Val, hop2-pp, hop2-Ala, hop2-pro, hop2-Arg, or hop2-Arg, or hop2-Arg, or hop2-Arg, or hop2-Arg, or hop2-Arg, or their coiologically active homologues. The method is used to treat humans coincide medullary cystic disease, multicystic dysplastic treath humans curaemic medullary cystic disease, multicystic dysplastic kidney disease, curaemic medullary cystic disease, and autosomal dominant polycystic correction (Op1) species defining the the conserved 6 cysteine skeleton in the conserved for the present sequence represents a human osteogenic protein (Op1) species defining the the conserved 6 cysteine skeleton in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query.Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                     08-APR-1988;
15-AUG-1988;
23-FEB-1989;
07-APR-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 97 AA;
                                                                                                                                                                                                                                                                                                                                                             08-APR-1988;
                                                                                                                                                                                                                                                                                                                                                                                         19-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Osteogenic device; osteogenic protein; biodegradable matrix.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human osteogenic protein 1(OP1-1) for osteogenic device
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-MAR-2003
21-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAP95681;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAP95681 standard; protein; 98 AA
                                                                                                                            Claim 9; Page
                                                                                                                                                                     Osteogenic devices comprising matrix contg. osteogenic proteins - prepd
                                                                                                                                                                                                                              Oppermann H,
                                                                                                                                                                                                                                                                                                                                                                                                                      WO8909788-A
                                                                                                                                                       by recombinant techniques
                                                                                                                                                                                                                                                           (CREA-) CREATIVE BIOMOLECULES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         active region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (revised)
(first entry)
                                                                                                                            48; 69pp; English
                                                                                                                                                                                                                               Kuberasamp T,
                                                                                                                                                                                                                                                                                       88US-00179406.
88US-00232630.
89US-00315342.
89WO-US001469.
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                                                                                                                                                                                                                               Rueger D;
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Pred. No. 4.3e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            endochronal bone;
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RESULT 6
AAP95682
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-APR-1988;
15-AUG-1988;
23-FEB-1989;
07-APR-1989;
                                                     The protein is capable of inducing endochronal bone formation in association with a biocompatible, in vivo biodegradable matrix. The protein is produced by expression of the recombinant DNA in a host cell and comprises more than one polypeptide chain, with an amino acid sequence sufficiently duplicative of COP5, COP7, COP16 or OP1. The protein and the implantable devices enable optimal predictable bone formation. Clinical applications include correction of acquired and congenital craniofacial and other skeletal or dental anomalies, induction of local endochondral bone formation in non-union fractures, peridontal applicas. requiring bone formation and cartilage repair, eg in the treatment of osteoarthritis. See also AAP95679-P95692 and AAN95097. (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            of local endochondral bone formation in non-union fractures, peridonta applicas, requiring bone formation and cartilage repair, eg in the treatment of osteoarthritis. See also AAP95679-p95692 and AAN95097. (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                            Osteogenic devices comprising matrix contg. osteogenic proteins - prepd by recombinant techniques.
                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Osteogenic device; osteogenic protein; endochronal bone; biodegradable matrix.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human
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Sequence 102
                                                                                                                                                                                                                                                                                                                                  Claim 10; Page 49; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-MAR-2003
21-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CREA-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                          1989-324203/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            53
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CREATIVE BIOMOLECULES
                                          l on 25-MAR-2003 to PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kuberasamp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  88US-00179406.
88US-00232630.
89US-00315342.
89WO-US001469.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88US-00179406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein 1(OP1-II) for osteogenic device
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rueger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 111; DB 1;
Pred. No. 4.4e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
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Query Match Best Local Similarity

100.0%;

Score 111; DB 1; Pred. No. 4.5e-07;

Length 102;

Query Match Best Local Similarity

100.0%;

Score Pred.

111; No. 4

DB 2;

Length

AA;

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RESULT 7
AAR53360
ID AAR5
XX AAR5
XX AAR5
XX AAR5
XX AAR5
XX AAR5
XX OSte
XX OST
XX
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01-JUL-2002
06-JUN-1994
                                          This sequence is a fragment of the osteogenic protein OP1 and is designated OP7. The sequence is a 102 C-terminal region and functional domain of OP1. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteograthritis.

(Updated on 01-JUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PR field.)
Sequence 102
                                                                                                                                                                                                                                                                                                                                  New pure mammalian osteogenic proteins - induce cartilage and endochondral bone formation when in association with a matrix
                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US5266683-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Osteogenic protein; bone; cartilage; matrix; osteoarthritis; repair; vascularisation; mineralisation; differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Osteogenic protein OP7.
                                                                                                                                                                                                                                                                                          Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-AUG-1990
07-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-APR-1988;
15-AUG-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR53360;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (STYC ) STRYKER CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-DEC-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-NOV-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR53360 standard; protein; 102 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-FEB-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .8-OCT-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57
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                                                                                                                                                                                                                                                                                                                                                                                                         AAQ53141.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (revised)
(revised)
(first entry)
                                                                                                                                                                                                                                                                                  69-72; 128pp; English.
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90US-00616374.
90US-00621849.
90US-00621988.
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92US-00827052
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8009-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         89US-00422699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ozkaynak
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                76
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RHL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>.</u>
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RESULT 8
AAW36897
ID MAW36897
ID AAW36897
ID AAW36897
AC AAW36
AC AAW3
AC AAW3
AC AAW3
AC MUTA
AC MAW368
AC AAW3
AC MUTA
AC MAW3
AC MUTA
AC MAW368
AC MUTA
AC MAW36
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AC MOMON
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AC 
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The present sequence represents a mutant human osteogenic protein-1 (hOP-1). OP-1 proteins are a group of morphogenically active proteins. Morphogens are inactive when reduced, but are active as oxidised homodimers and when oxidised with other morphogens. Morphogenic proteins such as OP-1 play an important role, not only in embryogenesis, but also in tissue and organ maintenance and repair in mammals. They induce a developmental cascade of tissue-specific morphogenesis in a mammal. This mutant has had Ala63 replaced with Ser to enhance the solubility of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human osteogenic protein-1; hOP-1; morphogen; morphogeni tissue-specific morphogenesis; 3-D structure; morphogenic anal therapeutic agent; diseased tissue regeneration; osteoporosis; bone-remodelling disease.
                                                                                                                                                                                                                                                   Computer system containing crystallographic coordinates of human osteogenic protein-1 - used for design of analogues with agonist activity, potentially useful for treating osteoporosis etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disulfide-bond
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disulfide-bond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mutant human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW36897 standard; protein; 102
                                                                                                                                                                                                             Disclosure;
                                                                                                                                                                                                                                                                                                                                                WPI; 1997-385296/35
                                                                                                                                                                                                                                                                                                                                                                                         Keck P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-JUL-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO9726277-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYBR-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CREA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     57
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                         AIND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS 76
                                                                                                                                                                                                                                                                                                                                                                                         Griffith DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                             Page; 176pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   osteogenic protein 1 with enhanced solubility
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96US-00589552
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note= "wild
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "region designated Finger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "region designated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "corresponds to
                                                                                                                                                                                                                                                                                                                                                                                              Carlson
                                                                                                                                                                                                             English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              INC
                                                                                                                                                                                                                                                                                                                                                                                           ₩D,
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                                                                                                                                                                                                                                                                                                                                                                                           Rueger DC,
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RESULT 9
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Typical applications of the therapeutic agents identified are in proliferation of progenitor cells and regeneration of damaged or diseased tissue (e.g. osteoporosis or other bone-remodelling diseases) but more generally in any situation where mimicking or agonism of hOp-1 is required. note: this sequence does not appear in the specification; it was created using information provided
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human osteogenic protein-1; hOP-1; OP-1; morphogen; morphogenic protein; tissue-specific morphogenesis; 3-D structure; morphogenic analogue; therapeutic agent; diseased tissue regeneration; osteoporosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            novel computer system. The system comprises a memory containing atomic X-ray crystallographic coordinates defining at least part of hOP-1, and a processor able to generate a molecular model having the three-dimensional shape representative of at least part of hOP-1. Morphogenic analogues with hOP-1 like activity can also be identified using this system. Typical applications of the therapeutic agents identified are in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 102
                                                                                                                                                                                                                                                                                                                                                                                         Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disulfide-bond
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                therapeutic agent; disease bone-remodelling disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human osteogenic protein 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAW36889;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAW36889 standard; protein; 102
                                                                                                                                                                                                                                                                                                                                                                                                                                        Region
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                   WPI; 1997-385296/35
                                                                Keck P,
                                                                                                                                                                                   22-JAN-1996;
                                                                                                                                                                                                                                22-JAN-1997;
                                                                                                                                                                                                                                                                            24-JUL-1997.
                                                                                                                                                                                                                                                                                                                           WO9726277-A2
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                                                                                                            CREATIVE BIOMOLECULES INCUNIV BRANDEIS.
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                                                                Griffith DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INPETVEKECCAPTQUNAIS
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34. .101
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1. .66
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                                                                                                                                                                                                                                                                                                                                                                          note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         note= "corresponds to
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                                                                                                                                                                                                                                                                                                                                                                                                                    note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        note= "region designated Finger
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                                                                     Carlson WD,
                                                                                                                                                                                                                                                                                                                                                                     "region
                                                                                                                                                                                                                                                                                                                                                                                                                    "region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "corresponds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a morphogenic protein.
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Pred. No. 4.5e-07;
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                                                                     Rueger
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                                                                                                                                                                                                                                                                                                                                                                     Finger
                                                                     'n,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              67
                                                                     Sampath
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RESULT 10
AAW36872
ID AAW36
XX AAW36
AC AAW36
AC AAW36
AC IO-MA
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Best Local S
Matches 20
                                                                                                                                                                                                                                           11-MAR-1991;
30-AUG-1991;
30-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human osteogenic protein; OP; OP-1; morphogen; morphogenic prote embryogenesis; organ maintenance; tissue-specific morphogenesis; arthritis; emphysema; osteoporosis; cirrhosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Computer system containing crystallographic coordinates of human osteogenic protein-1 - used for design of analogues with agonist activity, potentially useful for treating osteoporosis etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 102
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      WPI; 1997-384665/35
                                                                Ozkaynak E,
Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                         20-JUL-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                   22-JUL-1997.
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                                                                                                                                                          CREATIVE BIOMOLECULES INC.
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                                                                Oppermann
Smart JE;
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                                                                                                                                                                                                                 91US-00667274.
91US-00752764.
91US-00752861.
92US-00938021.
                                                                                                                                                                                                                                                                                                                                                                         94US-00278729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein 1 from which a consensus sequence is derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 111; DB 2;
100.0%; Pred. No. 4.5e-07;
                                                                                                Ή
                                                                                             Pang RH,
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                                                                                                Cohen CM,
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                                                                                             Kuberasampath
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The present sequence represents a part of a human osteogenic protein-1 (hOp-1). hOp-1 was first found in bone tissue, and is now known to be produced at relatively high levels in cells derived from renal or adrenal tissue. Op-1 proteins are a group of morphogenically active proteins. Morphogens are inactive when reduced, but are active as oxidised homodimers and when oxidised with other morphogens (e.g. AM33684-62). Comparison of the amino acid sequences of human and mouse Op-1 and Op-2 proteins has resulted in a consensus sequence, of which the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene for morphogenic protein expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; AAT97877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 2; Page; 49pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Screening for compounds which modulate morphogen expression - by incubating in the presence of epithelial cells which contain a cellular
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compounds which can be used in the treatment of compounds which can increase or the subjection of the cellular gene. A change in the large and of the compounds is in the subjection of the cellular gene. A change in the large and for the about to morphogenesis in a mammal. A novel method is described for screening a candidate compound for the ability to modulate expression of a cellular gene encoding a naturally occurring morphogenic protein.

CC The candidate compound is incubated with epithelial cells which express the cellular gene, and after a period of time the epithelial cells which express the lassayed for the presence of or the amount of the protein expressed by the cellular gene. A change in the level of the morphogenic protein relative compound is indicative of the ability of the compound is indicative of the ability of the compound to modulate compound is indicative of the ability of the compound to modulate compound is indicative of the ability of the compound to modulate compound which can increase or decrease morphogen production or levels. Such compounds can be used in the treatment of, e.g. arthritis, emphysema, oirrhosis of the liver note:- the present sequence does not appear in the specification. It was created using information provided. (Updated on C. 5-MAR-2003 to correct PR field.)

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                              Query Match
Best Local S
Matches 20
                                                                                     Sequence 102 AA;
                                               Similarity
INPETVPKPCCAPTQLNAIS 20
                              100.0%; Score 111; DB 2; ilarity 100.0%; Pred. No. 4.5e-07; Conservative 0; Mismatches 0;
                                                          Length 102;
                                 Indels
                                 0
                                Gaps
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0

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RESULT 11
AAY16708
                                         밁
                                        INPETVPKPCCAPTQLNAIS 76
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Growth factor; GF; persephin; neuron growth; cellular degeneration; peripheral neuropathy; amyotrophic lateral sclerosis; ischemic strok Alzheimer's disease; Parkinson's disease; Huntington's disease; trau brain injury; spinal cord injury; nervous system tumour; infection; multiple sclerosis; cardiac muscle degeneration; injury; neurotoxin; metabolic disease; diabetes; renal dysfunction; neurturin.
                                                                                                                                                                                                                                           17-AUG-1999
16-SEP-1997;
                                                                                                                                                                                                                                                                                          AAY16708 standard;
                        15-SEP-1998;
                                                  25-MAR-1999
                                                                          W09914235-A1
                                                                                                  Unidentified
                                                                                                                                                                                                                 WO9914235
                                                                                                                                                                                                                                                                  AAY16708;
                                                                                                                                                                                                                Seq
                                                                                                                                                                                                                                         (first
                                                                                                                                                                                                                 IJ
 97US-00931858
                         98WO-US019163.
                                                                                                                                                                                                                 No: 161
                                                                                                                                                                                                                                                                                          peptide; 102 AA
                                                                                                                                                                                                                                           entry)
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trauma;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CC The invention relates to a novel isolated and purified growth factor (GF) CC that comprises persephin or a fragment or a conservatively substituted CC variant. The persephin GF polypeptides can promote the survival and CC growth of neurons and non-neuronal cells. The persephin GF polypeptides CC or polynucleotides can be used for preventing or treating cellular CC or polynucleotides can be used for preventing or treating cellular CC degeneration or insufficiency, e.g. neuronal degeneration resulting from CC desease. Parkinson's disease, Huntington's disease, Alhheimer's CC disease. Parkinson's disease, Huntington's disease, ischemic stroke, CC acute brain injury, acute spinal cord injury, nervous system tumours, CC insufficiency resulting from eosinopenia, anemias, thrombocycopenia, or CC insufficiency resulting from eosinopenia, anemias, thrombocycopenia, or CC stem-cell insufficiences, cardiac muscle degeneration or injury, exposure to the used for treating e.g. peripheral nerve trauma or injury, exposure to CC neurotoxins, metabolic diseases such as diabetes or remal dysfunctions CC and damage caused by infectious agents. The GF can also be used for CC medium. The antisense polynucleotides can be used for treating a disease condition mediated by expression of persephin by a population of cells. The products can also be used for detection and diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 20
08-APR-1988;
15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
                                                                                                                                                                                                                    Human; osteogenic protein; OP-1; OPX; endochondral bone formation; cartilage; craniofacial defect; skeletal disorder; dental disorder; non-union fracture; osteoarthritis; vascularisation; mineralisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 102
                                                                                                                                                                                                                                                                                  Human osteogenic protein OP-1 fragment 330-431.
                                                                                                                                                                                                                                                                                                                  20-MAR-2003
24-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                  AAW89697;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 181;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New isolated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-244023/20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Johnson
                                                                              23-MAY-1995;
                                                                                                              26-JAN-1999.
                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                        bone marrow differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                AAW89697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   neuronal growth.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               57
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                                                                                                                                                                                                                                                                                                                                                                                              standard; peptide; 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
llarity 100.0%;
Conservative (
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                                                                                                                                                                                                                                                                                                                  (revised)
(first entry)
88US-00179406.
88US-00232630.
89US-00315342.
89US-00422613.
                                                                              95US-00449700
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  growth factor nucleic acids used to,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kotzbauer PT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 111; DB 2;
Pred. No. 4.5e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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The present invention describes isolated DNA (I) encoding at least one costeogenically active region of human osteogenic protein-1 in prepro form (C(DPI-PP), murine OPI-PP, murine OP2-PP or human OP2-PP. Also described care: (A) DNA related to (I) encoding a polypeptide able to form dimers that can induce cartilage and endochondral bone formation in a mammal C( when implanted in a matrix; (B) vectors containing (I) or related DNA; (C) host cells transformed with this vector; (D) DNA (I') encoding a costeogenic protein (II) produced by expression of transformed mammalian cells, able to induce bone and cartilage formation; (F) mature OP1 costeogenic protein (II) produced by expression of transformed mammalian cells following expression of the sequence that encodes hop1-PP; and (G) protein. Host cells of (C) are used to produce by truncating mature OP1 protein. Host cells of (C) are used to produce proteins able to induce cartilage and hone formation, e.g. for correction cf acquired or congenital craniofacial defects or other skeletal or code dental disorders; to heal non-union fractures; to repair cartilage, e.g. in osteoarthritis, or generally wherever bone formation is required. The proteins induce complete development of endochondral bone, including consecutarisation, mineralisation and bone marrow differentiation. The present sequence represents a human OP1 fragment. (Updated on 20-MAR-2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-OCT 1989
22-FEB 1990
20-AUG-1990
07-SEP 1990
18-OCT 1990
18-OCT 1990
21-NOV-1990
21-NOV-1990
04-DEC-1990
04-DEC-1990
22-FEB 1991
20-DEC-1991
Sequence
                                    present sequence represents a
to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acid encoding mammalian osteogenic proteins in prepro form - ab to induce cartilage and bone formation when implanted in matrix, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (STYC ) STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repairing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RHL,
102 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                       151; 127pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          bone defects.
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90US-00600024.
90US-00616374.
90US-00621849.
90US-00621988.
91US-00660162.
91US-00810560.
92US-00810560.
92US-00810563.
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90US-00483913.
90US-00569920.
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                                                                                                                                                                                                                                                                                                                                                                                                                                       English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ozkaynak E;
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Query Match
Query Match
Query Match
Best Local Similarity 100.0%; Pred. No. 4.5e-07;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps
Qy
1 INPETVPKPCCAPTQLNAIS 20
Db 57 INPETVPKPCCAPTQLNAIS 76
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有多 24.2000年最最初的 15.

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ARESULT 14
AAX992569
ID AAX9926
AC AAAY92
AC AAAY92
XX 10-AL
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XX Fus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OP-1 finger-1-heel-finger-2
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                                                                                                               Region
                                                                                                                                                                                                                                          Domain
                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          domain; heel region; BMP; TGF-beta family; protein refolding; protein; osteopathic; antibacterial; cytostatic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AA,
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                                                 2. .29
/label= finger_1
35. .65
/label= heel
                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          peptide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence.
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RESULT 15
AAB09534
ID AAB095
XX AAB09
XX AAB09
XX AAB09
XX AAB09
XX TGP-1
KW TGP-1
KW Drock
K
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            WO200020607-A2
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AAY92554-82 show the finger 1, heel and finger 2 domains of TGF-beta superfamily members. These sequences can be used to form novel fusion proteins. Novel proteins commrise biologically active TGF-beta family conditions. The fusion proteins comprises (1) a TGF-beta family protein conditions. The fusion proteins comprises (1) a TGF-beta family protein CC -terminal seven cysteine domain, comprising finger 1, finger 2 and heel subdomains; and (2) a heterologous leader sequence domain operatively linked to the C-terminal domain. Truncations, heterodimers and mutants of these fusion proteins and methods of purifying the heterodimers are also CC laimed. The TGF-beta family proteins can be used to induce the full cascade of morphogenic events which culminate in skeletal tissue formation, including cartilage and endochronal bone formation. They are constained in the binding of fibrin and fibronectin to the implanted matrix, chemotaxis of cells, proliferation of fibroblasts, differentiation into C chondroblasts, cartilage formation, vascular invasion, bone formation, cartivity, including altered receptor binding and improved biological activity, including altered receptor binding and improved targeting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local :
                                                                                                                                                                                   Human OP-1 C-terminal fragment,
                                                                                                                                                                                                                                                                    AAB09534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 102 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A biologically active TGF-beta family member fusion protein competent to refold, comprising a C-terminal linked TGF-beta family protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-OCT-1998;
16-AUG-1999;
Homo sapiens.
                                                                                                                                                                                                                          11-SEP-2000
                                                                                                                                                                                                                                                                                                         AAB09534 standard; protein; 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    capabilities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 145-146; 160pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oppermann H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-OCT-1999;
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                                       connective tissue; cartilage; vulnerary.
                                                                          TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; osteogenic protein; OP; bone morphogenetic protein; BMP; growth/differentiation factor; GDF; bone morphogenetic protein; BMP; growth/differentiation factor; GDF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (STYC ) STRYKER CORP
                                                           nhibin;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                           tissue morphogenesis; regeneration; bone; dental tissue;
                                                                                                                                                                                                                                                                                                                                                                                                               INPETVEKECCAPTQLNAIS 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tai M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0103418P
99US-00375333
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mccartney
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 111; DB 3;
Pred. No. 4.5e-07;
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                                                                                                                                                                                   SEQ ID NO:55.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
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RESULT 16
AAB02800
    SAXEXEXEX
BXXXXXX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   CC beta) superfamily members. These mutants comprise one or more amino acid CC substitutions in the base region of the finger 2 subdomain, and a C-ct terminal residue selected from Arg, lie, Leu, Ser and Ala. In the finger 2 subdomain, and a C-cc deaminal residue selected from Arg, lie, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg Lys), or residues containing an CC amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., CC Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-cc beta superfamily proteins regulate developmental processes and include proteins such as the osteogenic proteins (OPs), bone morphogenetic coroteins (BMPs), growth/differentiation factors (GDFs) and inhibins. CC proteins (BMPs), growth/differentiation factors (GDFs) and inhibins. CC invention are the finger 2 subdomain mutants of human osteogenic protein. CC invention are the finger 2 subdomain mutants of human osteogenic protein. CC invention are the finger 2 subdomain mutants of human osteogenic protein. CC interpretation for the complexity of human factors (GDFs) and inhibins. CC collagen hydroxyapatite or carboxymethylcellulose for regenerating bone, CC collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, CC influence and/or other mineralised skeletal or connective tissues e.g., CC ligament, tendon, muscle, fibrocartilage, joint capsule and cC arminary response-mediated tissue damage and scar tissue e.g., CC ligament, tendon, muscle, fibrocartilage, joint capsule and cC immune/inflammatory response-mediated tissue damage and scar tissue for mathing an injury. Compared to the wild-type TGF-beta contribution and interpretation following an injury. Compared to the wild-type TGF-beta contribution and interpretation following an injury. Compared to the wild-type TGF-beta superfamily proteins referred to in the specification.
                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-OCT-1998;
16-AUG-1999;
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  Tumour growth factor beta; TGF-beta; morphogenic protein; BMP; OP;
bone morphogenic protein; osteogenic protein; mutant; modified;
                                                                                                       22-AUG-2000
                                                                                                                                              AAB02800;
                                                                                                                                                                                  AAB02800 standard; protein; 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 147-148; 162pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tissue and connective tissue and comprises a substitution in a region the finger 2 domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2000-303787/26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (STYC ) STRYKER CORP.
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                                                                                                                                                                                                                                                                                                                                                                     20; Conservative
                                                                                                                                                                                                                                                                                        INPETVPKPCCAPTQLNAIS 76
                                                                                                                                                                                                                                                                                                                    INPETVPKPCCAPTQLNAIS 20
                                                                amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ΑĄ;
                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0103418P
99US-00374958
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                                                              acid
protein; osteogenic
                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 111; DB 3; 100.0%; Pred. No. 4.5e-07; Live 0; Mismatches 0;
                                                            sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mccartney
                                                                SEQ
                                                              ij
                                                                NO:55
                                                                                                                                                                                                                                                                                                                                                                                                            Length 102;
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RESULT 17
AAU10599
ID AAU10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    skeleton. (I) has ostrogenic, proliferative and antiinflammatory activities. The TGF-beta superfamily chimeric proteins (I) are useful for inducing tissue morphogenesis (i.e. molecules capable of tissue repair and regeneration and/or inhibiting inflammation) in bone, non-mineralised skeletal tissue, dental tissue, connective tissue, brain, liver and nerve and for inducing the proliferation and differentiation of uncommitted progenitor cells in a tissue-specific manner to support new tissue formation. AAA29887 to AAA29897 and AAB02748 to AAB0824 represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes a tumour growth factor beta (TGF-beta) superfamily chimeric protein (I) derived from at least 2 different members of the superfamily comprising a dimer with one monomer that contains a finger 2 domain derived from a first family member and a finger 1 domain and heel domain, both derived from a second family member. The monomer further comprises a conserved C-terminal cysteine member. The monomer further comprises a conserved C-terminal cysteine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel TGF-beta superfamily mutant chimeric protein, useful for inducing tissue morphogenesis in e.g. bone, comprises a dimer consisting of one monomer containing domains from two family members.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         finger 2 sub-domain; finger 1 domain; heel domain; chimeric protein; osteogenic; proliferative; antiinflammatory; tissue morphogenesis; tissue repair; regeneration; proliferation; differentiation.
                                                                                        morphogen;
protein com
                                                                                                        Human; osteogenic protein 1; hOP-1; OP-1; finger region; heel region; morphogen; metabolic bone disease; osteopenia; bone; fracture;
                                                                                                                                                      Human
                                                                                                                                                                                                                                                 AAU10599 standard; protein; 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-OCT-1998;
16-AUG-1999;
                                                         Homo sapiens
                                                                                                                                                                                     12-MAR-2002
                                                                                                                                                                                                                     AAU10599;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oppermann H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (STYC ) STRYKER CORP
                                                                                                                                                     osteogenic
                                                                                                                                                                                                                                                                                                                                57 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                            H
                                                                                                                                                                                                                                                                                                                                                                                            l Similarity 100
20; Conservative
                                                                                        ccordinate
                                                                                                                                                                                                                                                                                                                                                                                                                                                          102
                                                                                                                                                                                                                                                                                                                                                    INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Page 134-135;
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                                                                                                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0103418P.
99US-00374936.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99WO-US023370
                          Location/Qualifiers
                                                                                                                                                      protein 1
                                                                                            data
                                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              149pp; English.
                                                                                                                                                        (hop-1).
                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                          Score 111; DB 3;
Pred. No. 4.5e-07;
                                                                                                                                                                                                                                                                                                                                76
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                                                                                                                                                                                                                                                                                                                                                                                                                           Length 102;
                                                                                                                                                                                                                                                                                                                                                                                                Indels
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                                                                                                                                                                                                                                                                                                                                                                                              0
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1. .30
/note= "Finger 1 region"

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T3"

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RESULT 18
ABB76281
ID ABB76
XX Ostec
XX Ostec
XX Acy
FH Homo
XX Key
FH Disul
FT Regic
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a memory storing an atomic X-ray crystallographic coordinate, which defines a portion of human osteogenic protein-1 (hOP-1) of the finger or heel region. A processor, generates a molecular model having a three dimensional shape of the portion of human OP-1. This is used for designing, identifying and producing morphogen analogues of hOP-1, for treating mammals with metabolic bone disease such as osteopenia, or for generating morphogen based therapeutics for treating injured or diseased mammalian tissue, such as bone during fracture. This sequence represents human OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Computer system for producing morphogen analogs, has processor to generate molecular model having three dimensional shape of portion human osteogenic protein from the finger or heel region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Region
                                                                                                                                                                        Osteogenic protein antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Fig 12; 127pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI;
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 US2002028453-A1
                                  Region
                                                        Region
                                                                   Disulfide-bond
Disulfide-bond
                                                                                                     Region
                                                                                                                Disulfide-bond
                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                          Mature human
                                                                                                                                                                                                                                12-AUG-2002
                                                                                                                                                                                                                                                                            ABB76281 standard; protein; 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Keck
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CREA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-JAN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001-606375/69
                                                                                                                                                                                                                                                                                                                                                                                    Similarity
20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CREATIVE
                                                                                                                                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Griffith DL,
                                                                                                                                                                                    protein-1; OP-1; hOP-1; human; morphogen; vulnerary;
                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                A,
                                                                                                                                                                                                          osteogenic protein-1.
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                                                        /label= Finger-1
30. .99
34. .101
35. .67
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                      /label= Heel
68. .102
/label= Finge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note=
                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note=
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                                                                                                                                                                        protein
                                                                                                                                                                                                                                entry
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                                                                                                                                                                                                                                                                                                                                                                                  100.0%; S
100.0%; S
tive 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Carlson WD,
                       Finger-2
                                                                                                                                                                        co-ordinate data; cyclic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       English.
                                                                                                                                                                                                                                                                                                                                                                                  Score 111; DB 4;
Pred. No. 4.5e-07;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INC.
                                                                                                                                                                                                                                                                                                                                       76
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                        Length 102;
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                                                                                                                                                                                                                                                                                                                                                                                     Indels
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 ADG1412
ID ADG14
XX ADG14
AC ADG14
XX 26-FE
XX Human
XX Homo
XX Growt
XX Cell
XX Cell
XX Cell
XX YOSOO
PN US200
PD 02-0C
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Best Local S
Matches 20
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              02-OCT-2003
                                    US2003185792-A1
                                                          Homo sapiens
                                                                                                                                         Human osteogenic
                                                                                                                                                               26-FEB-2004
                                                                                                                                                                                      ADG14142
                                                                                                                                                                                                                                                                                                                                                             Sequence 102 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 26; 128pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Keck PC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (KECK/)
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22-JAN-1997;
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                                                                                                                                                                                                             ADG14142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SAMP/)
                                                                                  differentiation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2002-414103/44.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GRIFFITH D L.
CARLSON W D.
RUEGER D C.
SAMPATH K T.
                                                                                                                                                                                                                                                                                                                  20;
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                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                    INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                             standard;
                                                                                                                                                                                                                                                                      INPETVEKECCAPTOLNAIS 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Griffith DL,
                                                                                                                                                               (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96US-00589552
97US-00786284
                                                                                                                                         protein,
                                                                                                                                                                                                             protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Carlson WD,
                                                                                                                                         OP-1.
                                                                                                                                                                                                             102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    English.
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The present sequence is the protein sequence of human mature osteogenic correction! (hop-1), including the finger-1, heel and finger-2 regions. The correct invention is based on the X-ray crystallographic determination of the 3-dimensional structure of mature, dimeric hop-1. The 3-dimensional structure of mature, dimeric hop-1. The 3-dimensional structure of hop-1 has been resolved to 2.3 Angstroms. 2 Sets of atomic X crystallographic co-ovatinates for hop-1 are provided, the first correction of 2.3 Angstroms. These sets of atomic Co-dinates can be used in the computer aided design of protein or peptide analogues of Op-1, or to identify or design small organic molecules that functionally mimic Op-1. The engineering of hop-1 dimers to improve Stability, enhance water solubility, or to add or remove glycosylation sites, is envisaged. A compound that modulates Op-1 activity is useful for repairing diseased or damaged mammalian tissue, and for preventing or inhibiting immune/inflammatory response-mediated tissue damage or scar cut tissue formation following injury
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Producing morphogenic analog having osteogenic protein-1 like biological activity useful for therapeutic purposes, involves use of a portion of atomic co-ordinates defining three-dimensional structure of the protein.
                                       Human; osteogenic protein-1; OP-1; transforming growth factor TGFbeta; bone morphogenic protein; BMP5; BMP6; BMP2; BMP4; BM Growth Differentiation Factor; GDF5; GDF6; GDF7; cell growth;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 111; DB 5; larity 100.0%; Pred. No. 4.5e-07; Conservative 0; Mismatches 0;
cell proliferation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rueger
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 102;
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ADO36196
ID ADO3
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AC ADO3
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DT 29-(
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Tran
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Homm
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Homm
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                                                                                                                                                                                                                                                                                                                               RESULT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cc peptide comprising a peptide sequence having 6-50 amino acid residues based on or chosen from the finger 1, heel or finger 2 regions of the CT GTPbeta (transforming growth factor) beta) family proteins osteogenic CC protein-1 (Op-1), BMP5, BMP6, BMP2, BMP4, BMP8/OP2, GDF5 (Growth CC Differentiation Factor), GDF6 and GDF7. Also included are a peptide that CC brings together a type (I) and Type (II) receptor (comprising a first CC three contiguous amino acids of the protein regions detailed above and a CC second peptide sequence having a cysteine residue on each end and including at least contiguous amino acids of 1-34 amino acids of 10 clifferent amino acids sequence sixten expectation of acid sequences given in the specifications), a nucleic acid sequence encoding the above peptide, a pharmaceutical preparation CC comprising a sterile excipient and the above peptide, a peptidomimetic of the peptide and inhibiting or promoting growth, differentiation, or comprise and inhibiting or promoting growth, differentiation, or contiferentiation of a cell by contacting the cell with the above peptide. The antagonist peptide mimics or enhances the physiological effects of a corphogenic protein, such as osteogenic protein-1 (Op-1). The present of the protein used to design the peptides of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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06-JUN-2001;
05-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bone morphogenic protein antagonist peptide comprises peptide sequence having specified amino acid residues including contiguous amino acids of specific amino acid sequences given in the specifications.
                                                                             morphogen analogue production; tissue morphogenic protein; tissue morphogenic protei mimetic; solubility; stability;
                                                          protein
                                                                                                                 memory stores atomic X-ray crystallographic coordinate; human; transformation and differentiation factor-1; TDF-1;
                                                                                                                                                                          Transformation
                                                                                                                                                                                                               29-JUL-2004
                                                                                                                                                                                                                                                      ADO36196;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 102
                                                                                                                                                                                                                                                                                        ADO36196 standard; protein; 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a bone morphogenic protein (BMP) antagonist
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; SEQ ID NO 4; 88pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-031977/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-JAN-1996;
22-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-JUN-2002;
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                                                          co-ordinate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bosukonda D;
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; 2001US-0296291P.
; 2002US-0354820P.
; 2002US-0371298P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A,
                                                                                                                                                                                                             (first entry)
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97US-00786284.
                                                                                                                                                                          differentiation factor-1 fragment #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 111; DB 8;
Pred. No. 4.5e-07;
                                                                                                                                                                                                                                                                                                                                                                                        76
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
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RESULT 21
AAY92027
ID AAY92
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CC The invention describes memory stores atomic X-ray crystallographic CC coordinates defining a portion of human transformation and differentiation factor—1 (hTDF-1). A processor communicates with the CC memory to generate a molecular model having a three-dimensional shape CC representing portion of hTDF-1. Also described is a morphogen analogue CC production method. The system is useful for designing, identifying and CC producing molecules which act as functional mimetics of tissue CC morphogenic protein, TDF-1. The molecule is designed with enhanced CC solubility and stability under physiological condition. Also the CC biological activity of the hTDF-1 in mammal is enhanced. This is the CC amino acid sequence of a C-terminal fragment of human transformationand CC differentiation factor—1 (TDF-1) comprising the finger—1, heel and finger—2 regions, used in a comparison with another tissue morphogen protein, CC transforming growth factor beta 2 (TGF-beta2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 20
                                                                                                                                                                                                            human
CKGF;
                Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                     Misc-difference
                                                                                                                                                                                                                                                           Human
                                                                                                                                                                                                                                                                                       19-JUL-2000
                                                                                                                                                                                                                                                                                                                     AAY92027;
                                                                                                                                                                                                                                                                                                                                                  AAY92027 standard; protein; 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Computer system for producing tissue morphogenic protein analogs, has memory to store atomic X-ray crystallographic coordinates defining portion of human transformation and differentiation factor-1 (hTDF-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Fig 3; 82pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-439217/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Carlson WD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-NOV-2002; 2002US-00290554.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-NOV-2002; 2002US-00290554.
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                                                                                                                                                                                                            bone morphogenic protein-6; mutant; cystine knot growth
                                                                                                                                                                                                                                                                                                                                                                                                                              57
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   102
                                                                                                                                                                                                                                                                                                                                                                                                                                                        INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                             INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                          morphogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                       (first entry)
            /label= beta_hairpin_loop_1
/note= "mutant optionally comprises
substitutions in these residues"
41...80
                                                                                                                                                  Location/Qualifiers
                                                                                       receptor"
                                                                                                     /note= "optionally mutated to increase electrostatic interaction between beta hairpin structure and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
"optionally mutated to increase electrostatic
                                                                                                                                                                                                                                                        protein-7, osteogenic protein-1 factor monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 111; DB 8;
Pred. No. 4.5e-07
                                                                                                                                                                                                                                                                                                                                                                                                                              76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
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                                                                                                                                                                                                            BMP-6; osteogenic protein-1 factor; factor; hairpin loop; infertility.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 102;
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RESULT 22
AAR53361
ID AAR53
XX AAR53
AC AAR53
XX DT 25-MA
DT 01-JU
DT 06-JU
XX XX
XX XX
DT 08-JU
XX XX XX
DE N-ter
XX Ostec
                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                            bioactivity. Mutant cystine knot growth factor (CKGF) proteins comprising one or more mutant subunits and having novel properties or improved pharmacological properties, compared to wild type CKGFs, are claimed. The CKGF superfamily comprises at least four families of growth factors: the glycoprotein hormones, the platelet-derived growth factor (PDGF) family, the neurotrophins and the transforming growth factor-beta family; the families are known to be structurally similar (especially comprising the cysticus in the CKGF hairpin loops of family members and other members of the CKGF superfamily could significantly alter the biological activities of the CKGF. Mutant transforming growth factor family proteins or analogues are useful for treatment of ovulatory dysfunction, luteal phase defect, unexplained infertility, time-limited conception and in
                                                               25-MAR-2003
01-JUL-2002
06-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New mutant cystine knot growth factor proteins comprising one mutant subunits, useful for treating or preventing diseases e hypothyroidism and thyroid cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                Sequence 111
                                                                                                                                                                                                                                                                                                                                                                                                                  assisted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   altering
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 447; Page 309; 320pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Weintraub
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 Osteogenic
                                 N-terminally
                                                                                                                                                                 AAR53361 standard; protein; 114 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    is wild type
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                                                                                                                                                                                                                                                    67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               s wild type human bone morphogenic protein-7 (osteogenic protein-1 monomer). Mutants comprise at least one electrostatic charge monomer) that seem that the comprise at least one clectrostatic charge mg mutation in a beta hairpin loop, resulting in increased ivity. Mutant cystine knot growth factor (CKGF) proteins comprising
                                                                                                                                                                                                                                                                                  -
                                                                                                                                                                                                                                                                                                               l Similarity
20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     UNIV MARYLAND BALTIMORE.
                                                                                                                                                                                                                                                                                                                                                                                                                  reproduction
                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                  INPETVPKPCCAPTOLNAIS
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protein;
                                                                                                                                                                                                                                                                                                               100.0%;
ilarity 100.0%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                  Ä,
                                                               (revised)
(revised)
(first en
                                   truncated
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/note= "mutant optionally comprises
substitutions in these residues"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "optionally mutated to increase electrostatic
interaction between beta hairpin structure and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     interaction between beta hairpin structure
 bone; cartilage;
                                                                entry)
                             osteogenic protein OP1
                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                               Score 111; DB 3;
Pred. No. 4.9e-07;
0; Mismatches 0;
                                                                                                                                                                                                                                                  86
                                                                                                                                                                                                                                                                                20
 matrix; osteoarthritis; repair;
                                   (OP1-16Val)
                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                   Indels
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Matches 20
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15-AUG-1988;
23-FEB-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                              This sequence is a fragment of the osteogenic protein OP1 and is designated OP1-16Val. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-UTL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)
   Cystic kidney disease; renal; therapeutic; osteogenic protein; OP; bone morphogenic protein; BMP; growth factor-beta superfamily; polycystic kidney disease; multicystic dysplastic kidney disease; uraemic medullary cystic disease; human; OP1; truncated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-NOV-1993
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                                                                                    N-terminally
                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 114 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New pure mammalian osteogenic proteins - induce cartilage and endochondral bone formation when in association with a matrix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-FEB-1992;
                                                                                                                   26-MAR-1999
                                                                                                                                                   AAW95454;
                                                                                                                                                                                   AAW95454 standard;
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DB; AAQ53141.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRYKER CORP.
 medullary cystic disease;
                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                     INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Col 69-72; 128pp; English.
                                                                                                                                                                                                                                                                   INPETVPKPCCAPTOLNAIS
                                                                                                                                                                                                                                                                                                                                 100.0%; Score 111; DB 2; ilarity 100.0%; Pred. No. 5.1e-07; Conservative 0; Mismatches 0;
                                                                                  truncated mature human OP1,
                                                                                                                   (first
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90US-00616374.
90US-00621849.
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90US-00599543.
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                                                                                                                                                                                   protein;
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                                                                                                                  entry)
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                                                                                    OP1-16Val (residues 318-431).
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                                                                                                                                                                                                                                                                                                                                                                  Length 114;
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RESULT 24
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ID AAR53
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to methods for treating cystic kidney diseases. The CC method comprises administering an effective amount of a renal therapeutic congent or a polynucleotide encoding the therapeutic agent or a polynucleotide encoding the therapeutic gent is preferably a soluble or membrane bound polypeptide, e.g. a considered of the osteogenic protein/bone morphogenic protein (OpHamp) family considered and transforming growth factor-beta superfamily of proteins It is considered by one of the polypeptides hop1, hop1-pp, Op1-18Ser, Op5, Op7, CC Op1-16Ser, Op1-16Leu, Op1-16Met, Op1-16Ala, Op1-16Val, mOp1, mOp1-pp, Op1-16Ser, Op7, Op2-pp, hop2-pp, or hop2-ser or their considered considered the polypestic disease, multicystic dysplastic treat humans considered medulary cystic disease, multicystic dysplastic kidney disease, considered meture human osteogenic protein 1 (Op1) that can be used as a therapeutic agent in the method of the invention. Note: This sequence is not provided in the specification. It has been derived from the human Op1 sequence (AAM9544B) obtained from U.S. Patent No. 5,266,683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                            25-MAR-2003
01-JUL-2002
06-JUN-1994
                                                                                                                                                                               Osteogenic protein; bone; cartilage; matrix; osteoarthritis; vascularisation; mineralisation; differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Treating cystic kidney disease - using renal therapeutic agents or sequences encoding them, especially from the osteogenic protein/bone morphogenic protein family.
                                                                                                                                                                                                                                                                   N-terminally truncated osteogenic protein OP1 (OP1-16Ala).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-070084/06.
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      30-NOV-1993
                                                              US5266683-A.
                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR53362;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR53362 standard; protein; 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
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(revised)
(first entry)
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Pred. No. 5.1e-07;
; Mismatches 0;
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Matches 20
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18-OCT-1990;
21-NOV-1990;
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20-AUG-1990;
07-SEP-1990;
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23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           designated OP1-16Ala. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-UTL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                     Cystic kidney disease; renal; therapeutic; osteogenic protein; OP; bone morphogenic protein; BMP; growth factor-beta superfamily; polycystic kidney disease; multicystic dysplastic kidney disease; uraemic medullary cystic disease; human; OPI; truncated.
                                                                                                                                                                               N-terminally truncated
                                                                                                                                                                                                                                           AAW95453;
                                                                                                                                                                                                                                                                       AAW95453 standard; protein; 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 116 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New pure mammalian osteogenic proteins - induce cartilage and endochondral bone formation when in association with a matrix.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; AAQ53141.
                                               WO9850061-A1
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                                                                           Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
ilarity 100.0%;
Conservative (
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90US-00569920
90US-00579865
90US-00579543
90US-00616374
90US-00621849
90US-00621849
90US-0062198
91US-006198
91US-008198
91US-008198
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88US-00232630.

89US-00315342.

89US-00422613.

89US-00422699.

90US-00483913.
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                                                                                                                                                                                mature human OP1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 English.
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Pred. No. 5.1e-07;
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                                                                                                                                                                                  OP1-16Ala
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 116;
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                                                                                                                                                                                  (residues 316-431).
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12-NOV-1998

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RESULT 26
AAR53363
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Best Local
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01-JUL-2002
06-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 member of the osteogenic protein/Done morphogenic protein (OP/BMP) family within a transforming growth factor-beta superfamily of proteins. It is especially one of the polypeptides hop1, hop1-pp, OP1-16Ser, OP1-16Leu, OP1-16Ket, OP1-16Ala, OP1-16Val, mCP1, mCP1, OP1-16Ser, OP2-Pp, hop2-Ala, hOP2-Pro, hOP2-Arg, or hOP2-Ser or their biologically active homologues. The method is used to treat humans having, or at risk of, cystic kidney disease, e.g. autosomal recessive (infantile) polycystic disease, multicystic dysplastic kidney disease, uraemic medullary cystic disease, and autosomal dominant polycystic kidney disease, and autosomal dominant polycystic kidney disease. The present sequence represents a N-terminally truncated mature human osteogenic protein 1 (OP1) that can be used as a therapeutic agent in the method of the invention. Note: This sequence is not provided in the specification. It has been derived from the human OP1 sequence (AAW95448) obtained from U.S. Patent No. 5,266,683
15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to methods for treating cystic kidney diseases. The method comprises administering an effective amount of a renal therapeutic agent or a polynucleotide encoding the therapeutic agent. The therapeutic agent is preferably a soluble or membrane bound polypeptide, e.g. a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Treating cystic kidney disease - using renal therapeutic agents or sequences encoding them, especially from the osteogenic protein/bone morphogenic protein family.
                                                 08-APR-1988;
                                                                                 21-FEB-1992;
                                                                                                                  30-NOV-1993.
                                                                                                                                                  US5266683-A.
                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                  Osteogenic protein; bone; cartil; vascularisation;
                                                                                                                                                                                                                                                                   N-terminally
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                                                                                                                                                                                                                                                                                                                                                                                                   AAR53363 standard; protein; 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gjorstrup
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (BIOJ ) BIOGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1999-070084/06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      71
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                 (revised)
(revised)
(first en
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         æ
                                                                                                                                                                                                                                                                truncated osteogenic protein OP1 (OP1-16Met).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Harris
88US-00179406.
88US-00232630.
89US-00315342.
89US-00422613.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       67pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97US-0045909P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98WO-US009268
                                                                                   92US-00841646
                                                                                                                                                                                                                                                                                                 entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                       cartilage; matrix; coccsation; differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 111; DB 2;
Pred. No. 5.1e-07;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                    Ä
                                                                                                                                                                                                                                    matrix; osteoarthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ٥,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 27
AAW95452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-OCT-1989;
22-FEB-1990;
20-AUG-1990;
07-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-FEB-1991;
20-DEC-1991;
28-JAN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This sequence is a fragment of the osteogenic protein OPI and is designated OPI-15Met. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis.

(Updated on 01-JUI-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                  Cystic kidney disease; renal; therapeutic; osteogenic protein; OP bone morphogenic protein; BMP; growth factor-beta superfamily; polycystic kidney disease; multicystic dysplastic kidney disease; uraemic medullary cystic disease; human; OP1; truncated.
Gjorstrup P,
                                                                    07-MAY-1997;
                                                                                                   06-MAY-1998;
                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                     N-terminally truncated mature human
                                                                                                                                                                                                                                                                                                                                                      26-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                      AAW95452
                                                                                                                                                                                                                                                                                                                                                                                                                      AAW95452 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 117 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New pure mammalian osteogenic proteins - induce cartilage and endochondral bone formation when in association with a matrix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kuberasampath T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-DEC-1990;
04-DEC-1990;
                                                                                                                                                                    WO9850061-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (STYC
                                 (BIOJ ) BIOGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1993-395405/49.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Col 69-72; 128pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                      (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          90US-00599543.
90US-00600024.
90US-00616374.
90US-00621849.
90US-00621988.
   Harris R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              89US-00422699.
90US-00483913.
90US-00569920.
                                                                    97US-0045909P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            91US-00810560
92US-00827052
                                                                                                    98WO-US009268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             91US-00660162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90US-00579865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ozkaynak
                                                                                                                                                                                                                                                                                                                                                                                                                    protein; 117
                                                                                                                                                                                                                                                                                                                                                     entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 111; DB 2;
Pred. No. 5.2e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rueger
                                                                                                                                                                                                                                                                                                                                                                                                                      3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                     OP1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DC,
                                                                                                                                                                                                                                                                                                                       OP1-16Met (residues 315-431).
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Gaps

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OP;

Length 117; Indels

밁 Ś Pang

RHL,

Oppermann

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RESULT 28
AAY92595
   PRINTER X PRINTER PRIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cc method comprises administering an effective amount of a renal therapeutic capent or a polymucleotide encoding the therapeutic agent. The therapeutic capent is preferably a soluble or membrane bound polypeptide, e.g. a gent is preferably a soluble or membrane bound polypeptide. The therapeutic capent is preferably a soluble or membrane bound polypeptide. The therapeutic commiber of the osteogenic protein (OP/BMP) family commiber of the polypeptides hops, boperfamily of proteins. It is capecially one of the polypeptides hops, hop1-pp, poly-16Ket, OP1-16Ket, OP1-16K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sequences encoding them, especially from the osteogenic protein/bone morphogenic protein family.
                                                               A biologically active TGF-beta family member fusion protein competent refold, comprising a C-terminal linked TGF-beta family protein.
Claim 16; Page 153-154; 160pp; English
                                                                                                                                                                                                                                                                                                                                                                                                           07-OCT-1998;
16-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       finger 2 subdomain; BMP; TGF-beta family; protein refolding; OP-1;
fusion protein; osteopathic; antibacterial; cytostatic; mutant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Trypsin truncated H2223 mutant OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 4; Page; 67pp; English
                                                                                                                                                                                      WPI; 2000-303743/26.
                                                                                                                                                                                                                                                         Oppermann H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-APR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200020449-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY92595;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY92595 standard; protein; 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1999-070084/06
                                                                                                                                                                                                                                                                                                                                    (STYC ) STRYKER CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    relates to methods for treating cystic kidney diseases. The
                                                                                                                                                                                                                                                         Tai M
                                                                                                                                                                                                                                                                                                                                                                                                           98US-0103418P
99US-00375333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-US023372
                                                                                                                                                                                                                                                         Mccartney
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
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Pred. No. 5.2e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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RESULT 29
AAB09548
ID AAB09
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                          Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Osteogenic protein-1, OP-1, human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental ti
                              Claim 51; Page 155-156; 162pp; English
                                                                                                                                                                                                                                          07-OCT-1998;
16-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Trypsin truncated OP-1 mutant protein H2223,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 117
                                                                                                                                                                                                                                                                                          07-OCT-1999;
                                                                                                                                                                                                                                                                                                                        13-APR-2000.
                                                                                                                                                                                                                                                                                                                                                       WO200020607-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          activity, in capabilities
                                                                                                                                            WPI; 2000-303787/26
                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAB09548 standard; protein; 117
                                                                                                                                                                                                           (STYC ) STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 Similarity
20; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Silarity 100.0%; For Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A,
                                                                                                                                                                          Tai M,
                                                                                                                                                                                                                                          98US-0103418P.
99US-00374958.
                                                                                                                                                                                                                                                                                          99WO-US023371
                                                                                                                                                                            Mccartney J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 111; DB 3;
Pred. No. 5.2e-07;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO:69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
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The invention relates to mutant TGF-beta

(transforming growth factor

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RESULT 30
AAB02814
ID AAB02814
AAB02814
AAB AAB02
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AAB02
XX
AAB02
XX
AAB02
XX
Tumon
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                                           WPI; 2000-303776/26
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16-AUG-1999;
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                                                                                                                                       Tai M,
                                                                                                                                                                                                                                                                                                                     98US-0103418P.
99US-00374936.
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100.0%; Pred. No. 5.2e-07;
tive 0; Mismatches 0;
                                                                                                                                            Mccartney J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 117;
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Novel TGF-beta superfamily mutant chimeric protein, useful for inducing tissue morphogenesis in e.g. bone, comprises a dimer consisting of one monomer containing domains from two family members.
                                                                                                                                                Disclosure; Page 142-143;
                                                                                                                                                  149pp; English.
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CC The present invention describes a tumour growth factor beta (TGF-beta)
CC superfamily chimeric protein (I) derived from at least 2 different
CC members of the superfamily comprising a dimer with one monomer that
CC contains a finger 2 domain derived from a first family member and a
CC finger 1 domain and heel domain, both derived from a second family
CC member. The monomer further comprises a conserved C-terminal cysteine
CC skeleton, (I) has osteogenic, proliferative and antiinflammatory
CC activities. The TGF-beta superfamily chimeric proteins (I) are useful for
CC inducing tissue morphogenesis (i.e. molecules capable of tissue repair
CC and regeneration and/or inhibiting inflammation) in bone, non-mineralised
CC skeletal tissue, dental tissue, connective tissue, brain, liver and nerve
CC and for inducing the proliferation and differentiation of uncommitted
CC compenior cells in a tissue-specific manner to support new tissue
CC committed progenitor cells in a tissue-specific manner to support new tissue
CC sequences used in the exemplification of the present invention Sequence 117 AA;

Query Match Best Local S Matches 20 72 1 INPETVPKPCCAPTQLNAIS Similarity INPETVPKPCCAPTQLNAIS Conservative 100.0%; 0 91 20 Score 111; DB 3; Pred. No. 5.2e-07; ; Mismatches 0; Length 117; Indels 0 Gaps

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25-MAR-2003
01-JUL-2002
06-JUN-1994
N-terminally truncated osteogenic protein OP1 (OP1-16Leu)
                                                                                                            AAR53364;
                                                                                                                                           AAR53364 standard; protein; 119
                                      (revised)
(first entry)
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Osteogenic protein; bone; cartilage; matrix; osteoarthritis; vascularisation; mineralisation; differentiation.

Homo

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ARESULT 3:
ARRESULT 3:
ARRESULT 3:
ARRES 3 3 64
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15-AUG-1988;
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21-NOV-1990
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                                   90US-00483913
90US-00569920
90US-00599543
90US-00600024
90US-00616374
90US-00621849
90US-00621849
90US-00621988
91US-00621988
91US-00827052
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89US-00422613.
89US-00422699.
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(STYC)

STRYKER

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RESULT 32
AAW95451
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The invention relates to methods for treating cystic kidney diseases. The method comprises administering an effective amount of a renal therapeutic agent or a polynucleotide encoding the therapeutic agent. The therapeutic agent is preferably a soluble or membrane bound polypeptide, e.g. a
                                                                                                      morphogenic
                                                                                                                                                                                                                                                                                                                                                                                                 bone morphogenic protein; BMP; growth factor-beta superfamily; polycystic kidney disease; multicystic dysplastic kidney disease; uraemic medullary cystic disease; human; OPI; truncated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This sequence is a fragment of the osteogenic protein OP1 and is designated OP1-16Leu. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-UUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                         Claim 4; Page; 67pp; English
                                                                                                                                                                WPI; 1999-070084/06.
                                                                                                                                                                                           Gjorstrup P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim
                                                                                                                                                                                                                                                      07-MAY-1997;
                                                                                                                                                                                                                                                                                    06-MAY-1998;
                                                                                                                                                                                                                                                                                                                12-NOV-1998.
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                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cystic kidney
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-terminally truncated mature human OP1, OP1-16Leu (residues 300-431).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New pure mammalian osteogenic proteins - induce endochondral bone formation when in association
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1993-395405/49
N-PSDB; AAQ53141.
                                                                                                                                                                                                                          (BIOJ ) BIOGEN INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 119 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11; Col 69-72; 128pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 l Similarity
20; Conser
                                                                                                                   cystic kidney disease - using renal therapeutic agents or sencoding them, especially from the osteogenic protein/bone
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                                                                                                      protein family.
                                                                                                                                                                                            Harris
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                                                                                                                                                                                                                                                                                                                                                                                                                                              disease; renal; therapeutic; osteogenic protein; OP;
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Pred. No. 5.3e-07;
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RESULT 33
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12-JAN-1994;
31-MAY-1995;
01-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GDF-5; growth differentiation factor 5; TGF-beta; human; OP-1; transforming growth factor beta; skeletal development; endometriosis; cartilage differentiation; cell proliferative disease; uterine tumour bone dysplasia; spondylopithyseal dysplasia; achondroplasia; dysplasia; spondylopithyseal dysplasia; achondroplasia; dysplasia epiphysialis; metaphyseal dysostosis; hyperphosphatasia; enchondromatosis; hypophosphatasia; osteopetrosis; hyperphosphatasia; criniometaphyseal dysplasia; osteopetrosis; imperfecta; transgenic;
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                                                                                                          New antibody specifically binding to a GDF-5 polypeptide, useful fo diagnosing and treating cell proliferative disorders with aberrant activity, such as endometriosis, uterine tumors and those involving
                                                                                                                                                                                                           WPI; 2003-255226/25
                                                                                                                                                                                                                                                        Lee
                                                                                                                                                                                                                                                                                                  (LEES/)
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                                                                                         tissues.
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94WO-US000657.
95US-00455559.
98US-00145060.
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Pred. No. 5.3e-07;
; Mismatches 0;
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Example 2; Fig 3A; 36pp; English.

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RESULT 34
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Best Local
                                                                                                         The invention provides an osteogenesis stimulating fused protein (1) f a drug delivery system (DDS) of osteogenetic factor, having collagen avidity and polypeptides homologous to collagen avidity domain or its modified peptides. (1) is used for stimulation of osteogenesis, a localizing agent and a slow releasing agent for a drug delivery system. The present sequence represents the human BMP7 with enterokinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Osteogenesis; drug delivery system; DDS; BMP7; enterokinase.
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                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 22; 30pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-AUG-2000; 2000JP-00246744
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2002-438612/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        osteogenesis stimulating fused protein having collagen avidity used osteogenesis stimulator and a localizing agent.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        with enterokinase recognition sequence.
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Pred. No. 5.3e-07;
, Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
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Sequence 131

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01-JUL-2002
06-JUN-1994
This sequence is a fragment of the osteogenic protein OP1 and is designated OP1-16Ser. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-UUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-terminally truncated osteogenic protein OP1 (OP1-16Ser)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR53365;
                                                                                                                                                                                                             New pure mammalian osteogenic proteins - induce endochondral bone formation when in association
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07-SEP-1990;
                                                                                                                                                                         Claim 12;
                                                                                                                                                                                                                                                                                                                            Kuberasampath T,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-FEB-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INPETVPKPCCAPTOLNAIS 105
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                                                                                                                                                                       Col 69-72; 128pp;
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90US-00599543.
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                                                                                                                                                                                                                                                                                                                          Ozkaynak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein; 132
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Pred. No. 5.8e-07;
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                                                                                                                                                                                                                                                                                                                          Rueger DC,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      matrix; osteoarthritis;
                                                                                                                                                                                                                                                                                                                            Pang
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                                                                                                                                                                                                                                                                                                                              RHL,
                                                                                                                                                                                                               cartilage and with a matrix
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                                                                                                                                                                                                                                                                                                                                  The invention relates to methods for treating cystic kidney diseases. The method comprises administering an effective amount of a renal therapeutic agent or a polynucleotide encoding the therapeutic agent. The therapeutic cagent is preferably a soluble or membrane bound polypeptide, e.g. a member of the osteogenic protein/bone morphogenic protein (OP/BMP) family within a transforming growth factor-beta superfamily of proteins. It is especially one of the polypeptides hop1, hop1-pp, Op1-18Ser, OP5, OP7, CC OP1-16Ser, OP1-16Leu, OP1-16Met, OP1-16Ala, OP1-16Val, mOP1, mOP1-PP, CC OP1-16Ser, OP1-16Leu, OP1-16Met, OP1-16Ala, OP1-16Val, mOP1, mOP1-PP, CC OP1-16Ser, OP1-16Met, OP1-16Ala, OP1-16Val, mOP1, mOP1-PP, CC OP1-16Ser, OP1-16Met, OP1-16Ala, OP1-16Val, mOP1-PP, OP7, OP1-16Ser, OP1-16Met, OP1-16Val, mOP1-PP, OP7, OP1-16Ser, OP1-16Met, OP1-16Val, mOP1-PP, OP7, OP1-16Ser, OP1-16Val, mOP1-PP, OP7, OP1-16Ser, OP1-16Val, MOP1-PP, OP7, OP1-16Val, MOP1-PP, OP1-16Val, MOP1-PP,
                                                                                                                                     Query Match
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                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 4; Page; 67pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                morphogenic protein family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-070084/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gjorstrup P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAW95450 standard; protein; 132
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (BIOJ ) BIOGEN INC.
87
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                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                              132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cystic kidney disease - using renal therapeutic agents sencoding them, especially from the osteogenic protein.
INPETVPKPCCAPTQLNAIS 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INPETVPKPCCAPTQLNAIS 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INPETVPKPCCAPTQLNAIS
                                                           INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                              AA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Harris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97US-0045909P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98WO-US009268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; ---
                                                                                                                                                                      100.0%;
                                                                                                                                     0
                                                                                                                                     Score 111; DB 2;
Pred. No. 5.8e-07;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. 5.8e-07;
Mismatches 0;
                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                    Length 132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein/bone
                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          o
                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
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RESULT 38
AAR23187
ID AAR23
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                                                                                                                                                                                                                                                                                                          RESULT 37
AAY08297
                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                              This invention describes the novel preparation of biologically active dimers of recombinant human growth factors of the cysteine knot family starting from cellular inclusion bodies. Such dimers are are useful in pharmaceutical compositions and the method provides yields of 31-39.7%, in examples, compared with about 10% for the conventional method (see Biothemistry, 28 (1999) 2956). ARV80278-V08301 are human growth factor protein fragments used in the method of the invention
                                                                                                          27-AUG-2003
01-JAN-1980
                                                                                                                                                               AAR23187
                                            Mammalia
                                                              Osteogenic;
                                                                                     Osteogenic
                                                                                                                                          AAR23187;
                                                                                                                                                                                                                                                                                                         Sequence 138 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 14; Page 11; 14pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Preparing active growth factor dimers from inclusion bodies in yield.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Growth factor; human; dimer; cysteine knot; cellular inclusion body;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAY08297;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-278785/24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kaerst U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DE19748734-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    pharmaceutical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human growth factor protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAY08297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GBFB ) GES BIOTECHNOLOGISCHE FORSCHUNG MBH
                                                                                                                                                                                                                     93
                                                                                                                                                                                                                                         _
                                                                                                                                                                                                                                                               ch 100.0%; l Similarity 100.0%; 20; Conservative C
                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS
                                                                                                                                                              standard; protein; 139
                                                                                                                                                                                                                     INPETVPKPCCAPTQLNAIS 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard; protein;
                                                                                     protein for dispersal in implantable osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mueller C,
                                                              implant; endochondral; bone;
                                                                                                          (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97DE-01048734
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rinas U,
                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   fragment
                                                                                                                                                                                                                                                              Score 111; DB 2;
Pred. No. 6.1e-07;
Mismatches 0;
                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Weich H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BMP-7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Erdmann
                                                                                                                                                                                                                                                                                    Length 138;
                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ξ
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12-DEC-1991

29-MAY-1990;

90US-00529852

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Best Local S
Matches 20
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                                                                                                                                                                                                               Key
Region
                                                                                                                                                                                                                                                                                                                         25-MAR-2003
26-FEB-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to an implantable device for inducing endochordal bone formation in a shape conforming to the shape of the device. The device comprises an osteogenic protein dispersed in a porous matrix which is a polymer of collagen and glycosaminoglycan crosslinked to an Mc value of 800 to 60,000. The osteogenic protein comprises a pair of subunits constituting a stable dimer under oxidising conditions. The present sequence (designated OP1), when dimerised to form a homodimer or a heterodimer with certain other protein sequences, can induce endochordal bone formation and hence is preferred as one of the pair of subunits. (Updated on 27-AUG-2003 to correct OS field.)
Compsns. for increasing progenitor cell population - contain a morphogen to induce proliferation, useful for inhibiting neoplastic growth,
                                                                                                                                11-MAR-1992;
                                                                                                                                                        17-SEP-1992.
                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                        Morphogen; morphogenic protein
                                                                                                                                                                                                                                                                                                Mature human osteogenic protein hOP1.
                                                                                                                                                                                                                                                                                                                                                                                  AAR27285 standard;
                                     WPI; 1992-331475/40
                                                             Cohen
                                                                                                          11-MAR-1991;
                                                                                                                                                                                WO9215323-A1
                                                                                                                                                                                                                                                                                                                                                             AAR27285;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Osteogenic device for implantation - comprising osteogenic protein dispersed in porous matrix of collagen and glycosaminoglycan.
                                                                                   (CREA-) CREATIVE BIOMOLECULES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1992-007153/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (CREA-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                            INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                             INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Page 34; 39pp; English.
                                                           Kuberasampath T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AA;
                                                                                                                                                                                                                                                                                                                        (revised)
(first entry)
                                                                                                          91US-00667274.
                                                                                                                                92WO-US001968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Berlowitz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             90US-00529852
                                                                                                                                                                                                                Location/Qualifiers 38. .139
                                                                                                                                                                                                     /note=
                                                                                                                                                                                                                                                                                                                                                                                  protein; 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                   "conserved seven cysteine skeleton"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Į,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 111; DB 2; L
Pred. No. 6.1e-07;
                                                           Pang RHL,
                                                                                                                                                                                                                                                                                                                                                                                   A
                                                         Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 139;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                         Rueger DC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
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AAR53366
AAR53366
XX
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XX
DT 01-J
DT 01-J
DT 05-J
DT 05-J
DT 05-J
PR 08-J
PR 11-J
PR 11-J
PR 12-J
PR 12-J
PR 11-J
PR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-MAR-2003
01-JUL-2002
06-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mature hOP1 is one of the preferred known morphogens which can be used in the manufacture of pharmaceuticals for inducing non-chondrogenic mammalian tissue growth, progenitor cell proliferation and hepatic tissue growth and for maintaining the phenotypic expression of differentiated cells in a mammal. Morphogens sharing at least 70% homology with hOP1 or at least 65% identity with residues 43-139 of hOP1 are included. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N-terminally truncated osteogenic protein OP1 (OP1-18Ser).
                                                                                                                                                                                                                                                                                                                                                                                                                                           07-SEP-1990
18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Osteogenic protein; bone; cartilage; matrix; ostevascularisation; mineralisation; differentiation
                                                                                                                                                                                                                    (STYC)
                                                                                                                                                                                                                                                                                                                                                                                             21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-APR-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US5266683-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR53366;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR53366 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 139 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 11; Page 82-83; 132pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inducing tissue repair and in diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                    .8-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40
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                                                                                                                                                                                                                                                                                                  -1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20;
                                                                                                                                                                                                                    STRYKER CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (revised)
(revised)
(first en
                                                                                                                                                                                                                                                                91US-00660162.
91US-00810560.
92US-00827052.
                                                                                                                                                                                                                                                                                                                                         90US-00616374.
90US-00621849.
90US-00621988.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     89US-00422699.
90US-00483913.
90US-00569920.
                                                                                                                                                                                                                                                                                                                                                                                                                  90US-00600024.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8905-00422613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     89US-00315342.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 111; DB 2;
Pred. No. 6.1e-07;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          matrix; osteoarthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of tissue dysfunction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 139;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repair;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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New pure mammalian osteogenic proteins - induce cartilage and endochondral bone formation when in association with a matrix

WPI; 1993-395405/49. N-PSDB; AAQ53141.

Kuberasampath T,

Ozkaynak

'n

Rueger

Š

Pang RHL,

Oppermann

8×5555555555

Claim

13;

Col

69-72;

128pp; English.

This sequence is a fragment of the osteogenic protein OP1 and is designated OP1-18ser. The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-UUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)

cascade

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The sequences given in AAR33921-30 are morphogens derived from human, Drosophila, Xenopus and murine sources. These morphogens are inactive when reduced but are active as oxidised homodimers and when oxidised i combination with other morphogens. These morphogens are capable of stimulating proliferation of progenitor cell, stimulating the differentiation of progenitor cells, stimulating the proliferation of differentiated cells and supporting the growth and maintenance of differentiated cells, including the redifferentiation of transformed cells. These morphogens may also be capable of inducing redifferentiation of committed cells under appropriate environmental conditions.
                                                                                                                                                                                                                                Screening cpds. to determine ability to modulate effective concn. of a morphogen - by assaying test tissue type cells for parameter indicative of a prodn. level change of morphogen.
                                                                                                                                                                                                                                                                                                                       Pang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Morphogen; homodimer; stimulate; proliferation; progenitor cell; differentiation; growth; redifferentiation; transformation; huma
                                                                                                                                                                                                                                                                                          WPI; 1993-100993/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Drosophila; Xenopus; committed cells.
                                                                                                                                                                                                    Disclosure; Page 73-74; 132pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                 30-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                             28-AUG-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9305172-A1.
                                                                                                                                                                                                                                                                                                                                                                     (CREA-) CREATIVE BIOMOLECULES INC
                            (Updated
                                                                                                                                                                                                                                                                                                                         RHL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens.
                                                                                                                                                                                                                                                                                                                                     JE,
                             9
                                                                                                                                                                                                                                                                                                                         Oppermann
Cohen CN;
                             25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                 91US-00752861
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                             to correct
                                                                                                                                                                                                                                                                                                                                         Ozkaynak E,
                                PN field.
                                                                                                                                                                                                                                                                                                                                          Kuberasampath
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                                                                                                                                                                                                                                                                                                                                          Rueger
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DC:

in

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Sequence 139

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RESULT 42
AAR33398
ID AAR333
XX AAR33
XX AAR33
XX 25-MA
DT 15-JU
XX Humar
XX Humar
XX Hop-1
KW Hop-1
KW decep
KW morph
KW Morph
KW Trans
XX Trans
XX Homo
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30-AUG-1991;
30-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    morphogenic; osteogenic protein; developmental cascade; hOP-1; mouse OP-1; mCP-1; hOP-2; mCP-2; CBMP2B; CBMP2B; decapentaplegic; Xenopus Vgl; mouse Vgr-1; GDF-1; BMP3; morphogen 60(A); inflammation; anti-inflammatory; Transforming Growth Factor; TGF-beta super-family.
                                                                                                                                  Human osteogenic protein (OP)-1 is a preferred morphogen for use in treating tissue damage in e.g. inflammatory disease, autoimmune disease, arthritis, psoriasis, dermatitis, diabetes and emphysema. Proteins having at least 60% homology with amino acids 43-139 of hOP-1 can also be used. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                               tissue damage, reperfusion inj
                                                                                                                                                                                                                                                                  Morphogen-induced modulation of inflammatory response
tissue damage, e.g. in autoimmune diseases, diabetes,
                                                                                                                                                                                                                                                                                                                                 Kuberasampath
Ozkaynak E, S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human mature OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAR-2003
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                                                                                                           Sequence 139 AA;
                                                                                                                                                                                                                      Claim 30; Page 102; 165pp; English
                                                                                                                                                                                                                                                                                                       WPI; 1993-100652/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-AUG-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9304692-A1.
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                                                                                                                                                                                                                                                                                                                                                                          (CREA-) CREATIVE BIOMOLECULES INC.
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                          1 INPETVPKPCCAPTQLNAIS
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                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        standard;
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 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                ge, e.g. in autoimmune injury, etc.
                                                      100.0%; ilarity 100.0%; Conservative
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(first ent
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91US-00752861.
91US-00753059.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /label= C-terminal_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "contains conserved 6 Cys skeleton"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein; 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 111; DB 2;
100.0%; Pred. No. 6.1e-07;
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                                                       0;
                                                                                                                                                                                                                                                                                                                                                Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                      Score 111; DB 2;
Pred. No. 6.1e-07;
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                                                         Mismatches
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                                                                                     DB
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                                                                                      <u>د.</u>
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                                                                                   Length 139;
                                                            Indels
                                                                                                                                                                                                                                                                  asthma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human OP-1;
Drosophila
                                                                                                                                                                                                                                                                     and resulting
sthma, ischaemia
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                                                            Gaps
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human;

mouse;

RESULT 41 AAR33921 ID AAR33

AAR33921

standard;

protein; 139

AAR33921;

Morphogen hOP-1.

25-MAR-2003 13-JUL-1993

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1 INPETVPKPCCAPTQLNAIS 20

INPETVPKPCCAPTQLNAIS 113

Matches Query Match Best Local

20;

h 100.0%; Similarity 100.0%; 20; Conservative C

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Score 111; DB 2; Pred. No. 6.1e-07; Mismatches

Length 139;

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0

Sequence 139 AA;

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RESULT 43
AAR31467
ID 3AR31
XX AAR31
XX AAR31
XX AAR31
XX AAR31
XX AAR31
XX AAR31
XX Matur
XX
ARASOLLY 44
ARASOT24
ID ARASO
XX ARASO
AC ARASO
AC ARASO
XX 25-M2
DT 25-M2
DT 25-M2
DT 25-M2
CY LISS
XX humar
XX humar
XX humar
XX humar
XX morph
XX Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The sequences given in AAR31467-69 represent the subunits D, B and C of P3 0-31, respectively. P3 OF 31-34 is an osteogenically active protein. A primary osteogenically active peptide is formed of a heterodimer of P3 OF 31-34 subunits B and D which are linked by at least one disulphide bond. The B/D heterodimer stimulates osteo- genesis and can be used to induce bone formation in mammals, to repair bone defects. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Osteogenically active comprise hetero-dimer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-MAR-2003
26-MAY-1993
                                                              human osteogenic protein; hOP1; morphogen; infant food tissue morphogenesis; tissue development; bone growth; morphogen-enriched nutritional product.
                                                                                                                                                                                              Human mature
                                                                                                                                                                                                                                                                25-MAR-2003
25-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                            AAR46724 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-JUN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUL-1991;
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20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
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llarity 100.0%;
Conservative 0
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                                                                                                                                                                                              osteogenic protein hOP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-34 subunit
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                                                                                                                                                                                                                                                                                                                                                                                                                            protein; 139
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein preparations for repairing bone defects - of P3 OF 31-34 sub-unit B and P3 OF 31-34 sub-unit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Parsons TF;
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Pred. No. 6.1e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               113
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 139;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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      AARAGO 967
ID AARAGO
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XX DT 11-OC
XX Matux
AARAGO
XX MATUX
XX MOP-1;
KW MOPSHO
XX M
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      (CREA-) CREATIVE
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BIOMOLECULES

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Query Match
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Matches 20
 15-SEP-1992;
04-MAR-1993;
31-MAR-1993;
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16-SEP-1992;
04-MAR-1993;
31-MAR-1993;
                                                                                                                                                                OP-1; OP-2; CBMP2; Vgl(fx); Vgr(fx); DPP(fx); GDF-1(fx); 60A(fx); BMP3(fx); BMP5(fx); BMP6(fx); osteogenic protein; morphogen; morphogenic protein; morphogenesis; progenitor; differentiation; stimulation; Drosophila melanogaster; fruit fly.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             suitable for people at risk for tissue damage due to protein energy mainutrition or to altered metabolism function and infant formulations to enhance tissue development in an infant or juvenile. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human osteogenic protein hOP1 and proteins having at least 70% homology with it are preferred morphogens for inclusion in new morphogen-enriched nutritional formulations. The formulations are dietary compositions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Morphogen enriched dietary compositions and infant formula - cape enhancing tissue morphogenesis, development and viability, e.g. infants, aged individuals and metabolic disorders, e.g. anorexia
                                                                                   31-MAR-1994
                                                                                                                                                                                                                                      Mature human
                                                                                                                                                                                                                                                                 25-MAR-2003
11-OCT-1994
                                                                                                                                                                                                                                                                                                                                     AAR60967 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 139 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-JUL-1993;
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                                                         15-SEP-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity 100.
20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                        INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Page 100; 160pp;
                                                                                                                                                                                                                                                                 (revised)
(first en
                                                                                                                                                                                                                                        OP-1.
92US-00945292.
93US-00029335.
93US-00040510.
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92US-00946235.
93US-00029335.
93US-00040510.
                                                         93WO-US008741
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cohen CM,
                                                                                                                                                                                                                                                                                                                                     protein; 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                 entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 111; DB 2;
Pred. No. 6.1e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 139;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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RESULT 46
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Morphogenically active fragments of 60A protein are used to induce tissue morphogenesis, to increase a progenitor cell population in a mammal, to stimulate progenitor cells to differentiate and maintain their differentiated phenotype in vivo and in vitro, to induce tissue-specific growth in vivo and to replace diseases or damaged tissue in vivo. Use of hOP-1, mOP-1, hOP-2, CEMP-2A, CEMP-2B, DPP, Vgl. Vgr.1, GDF-1, DPP-1, hOP-1, hOP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Drosophila 60A protein morphogenically active fragments - - for tissue morphogenesis, increasing progenitor cell populations, progenitor cells to differentiate, etc.
                                             The DNA sequences given in AAQ89255-59 encode the bone morphogenetic proteins EMP-2, EMP-4, EMP-5, EMP-6 and EMP-7 (AAR71970-74), respectively. The DNA is used to prepare mutant forms of recombinant EMPs, as well as EMP homodimers or heterodimers, that are expressed ibacteria, pref. Escherichia coli G1724 (ATCC 55155)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 139 AA;
Sequence 139 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1994-118146/14.
                                                                                                                                                                                      Disclosure; Col 25-26; 16pp; English.
                                                                                                                                                                                                                                                            Mutant
                                                                                                                                                                                                                                                                                                            N-PSDB;
                                                                                                                                                                                                                                                                                                                                   WPI; 1995-130739/17.
                                                                                                                                                                                                                                                                                                                                                                                  Wolfman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-MAR-1995.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 96; 115pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                             (GEMY )
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                                                                                                                                                                                                                                 Bone morphogenetic proteins (BMPs) and corresp. I of correctly folded, biologically active BMPs in
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Similarity 100.0%;
20; Conservative (
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                                                                                                                                                                                                                                                                                                                                                                                Mccoy J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93US-00163877
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein; 139
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 111; DB 2;
Pred. No. 6.1e-07;
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                                                                                                                                                                                                                                                                 DNA - useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cohen CM
                                                                                                                                                                                                                                           bacteria.
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RESULT 47
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Matches 20
                                                                                                                             Query Match
Best Local
                                                                                                       Matches
                                                                                                                                                                                                                                                                                 Mouse embryo osteogenic protein OP-1 (AAM00222) is a morphogenically active dimeric protein having a C-terminal 7-cysteine domain that shares a defined relationship with similar domains of other morphogenic proteins (see also AAW00219-35). It comprises amino acids 292-430 of full-length OP-1 (AAW00237), and can be expressed from intact or truncated cDNA (see also AAT33442) in prokaryotic or eukaryotic host cells. Mouse OP-1 and other morphogens, partic. human OP-1 (AAW00221), can be used to induce dentine morphogenesis, to seal dental cavities and to desensitise teeth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Use of morphogen(s), e.g. osteogenic proteins, on dentinal surfaces inducing dentine morphogenesis, desensitising teeth or sealing tooth cavities.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus
                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 28; Page 43; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Charette MF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAR-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-NOV-1996
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                                                                                                                                                                                                                                                             to pressure and/or temp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1996-412583/41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-FEB-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Morphogen; osteogenic protein; dentine; tooth decay; caries;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CREA-) CREATIVE BIOMOLECULES INC
94
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                                                                                                          20;
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                                                                                                                                   Similarity
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                                                                                                                                                                                                              139
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INPETVPKPCCAPTQLNAIS
                                                  INPETVEKECCAPTOLNAIS 20
                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                              AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rutherford RB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95US-00396930.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          odontoblast; OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96WO-US002169
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/note= "7-cysteine_domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
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                                                                                                    Score 111; DB 2;
Pred. No. 6.1e-07;
Mismatches 0;
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Pred. No. 6.1e-07;
; Mismatches 0;
113
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                                                                                                                                                         Length 139;
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                                                                                                          Indels
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RESULT 48
AAW00221
ID AAW00

AAW00221 standard; protein; 139

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RESULT 49
AAW40180
ID AAW4C
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 28; Page 42; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Use of morphogen(s), e.g. osteoginducing dentine morphogenesis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAR-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       morphogenesis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Morphogen;
                        Osteogenic protein; OP-1; bone morphogenic protein; OP/BMP family; chronic renal failure; renal therapeutic agent; disease; diabetes; nephropathy; glomerulopathy; hypertrophy; sclerosis; nephritis; human; dysplasia; fibrosis; glomerular filtration rate; GFR.
                                                                                                                                                                                                                                                                                                                                                    Sequence 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cavities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Charette MF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-FEB-1996;
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                                                                                           Human hOP1 mature protein
                                                                                                                                                                          AAW40180 standard;
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CREA-)
                                                                                                                                                                                                                                              94
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                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                              INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          osteogenic protein; dentine; tooth decay; caries; sis; odontoblast; OP-1.
                                                                                                                                                                                                                                                                                             100.0%; Score 111; DB 2; llarity 100.0%; Pred. No. 6.1e-07; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                    ΑA;
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                                                                                                                       (first entry)
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/note= "7-cysteine_domain
                                                                                                                                                                         protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            e.g. osteogenic proteins, on dentinal surfaces phogenesis, desensitising teeth or sealing tooth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RB
                                                                                                                                                                            139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of OP-1"
                                                                                                                                                                                                                                                                                                                         Length 139;
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                                                                                                                                                                                                                                                                                                  Gaps
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RESULT 50
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Best Local S
Matches 20
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                                                                                                                                Human osteogenic protein; OP; OP-1; morphogen; morembryogenesis; organ maintenance; tissue-specific arthritis; emphysema; osteoporosis; cirrhosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Treatment of chronic renal failure - using an morphogenetic protein renal therapeutic agent mesenchymal progenitor cells.
                                                                                                                                                                                                                  25-MAR-2003
10-MAR-1998
                                                                                                                                                                                                                                                           AAW36871;
                                                                                                                                                                                                                                                                                    AAW36871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 139
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-MAY-1996;
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                                                                                                          Homo
                                                                                                                                                                                       Mature protein amino acid sequence of human osteogenic protein 1 (hOP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CREA-) CREATIVE BIOMOLECULES
                                                                               Key
                                                                Region
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                                                                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          replacement
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                                                                                                                                                                                                                                                                                   standard; protein; 139
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                                                                                                                                                                                                                                                                                                                                                                               INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                 (revised)
(first entry)
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                                                                Location/Qualifiers
                                                      /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3
                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 111; DB 2; 100.0%; Pred. No. 6.1e-07; Live 0; Mismatches 0;
                                                     "conserved 7 Cys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INC.
                                                                                                                                                                                                                                                                                                                                                                               20
                                                      skeleton"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     osteogenic protein/bone or morphogen or renal
                                                                                                                                                                morphogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                   morphogenesis;
                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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22-JUL-1997 US5650276-A

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RESULT 51
AAW54064
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Best Local :
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30-AUG-1991;
30-AUG-1991;
28-AUG-1992;
              Bone morphogenetic protein-8; BMP-8; bone bone disorder; cartilage injury; therapy;
                                                               Bone morphogenetic protein-7.
                                                                                                   25-MAR-2003
10-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Screening for compounds which modulate morphogen expression - by incubating in the presence of epithelial cells which contain a cellular gene for morphogenic protein expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1997-384665/35.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ozkaynak E,
                                                                                                                                                                                    AAW54064 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CREA-) CREATIVE BIOMOLECULES INC
                                                                                                                                                                                                                                                                         94
                                                                                                                                                                                                                                                                                                                                          20;
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                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                          139 AA;
                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS 20
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Smart JE;
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                                                                                               (revised)
(first entry)
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91US-00752764.
91US-00752861.
92US-00938021.
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                                                                                                                                                                                    protein; 139
                                                                                                                                                                                                                                                                                                                                                        100.0%;
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                                                                                                                                                                                                                                                                                                                                                          Score 111; DB 2;
Pred. No. 6.1e-07;
                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cohen CM,
                formation; cartilage formation; BMP-7.
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                                                                                                                                                                                                                                                                                                                                                                        Length 139;
                                                                                                                                                                                                                                                                                                                                          0
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RESULT 52
AAW84215
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This sequence is the bone morphogenetic protein-7 (BMP-7). A mutated version of the BMP-8 DNA sequence, encoding a protein having Ser-63 replaced with His, is the BMP-8 DNA sequence of the invention. Bone morphogenetic proteins are able to induce bone or cartilage formation and are expected to be useful for treating bone or cartilage injuries or disorders. Expression of the BMP-8 mutant DNA in bacterial cells yields correctly folded BMP-2/8 heterodimers. (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                             Proteinase site; bone morphogenetic fusion protein; bone binding site; bone morphogenetic protein; transforming growth factor beta; active fragment; wound healing; bone growth; purification tag.
                                                                                                                                                                                  03-JUN-1997;
                                                                                                                                                                                                                                    02-JUN-1998;
                                                                                                                                                                                                                                                                                                                                         W09855137-A1
                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bone morphogenetic protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA encoding bone morphogenetic protein \theta mutant -folded hetero:dimer(s).
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N-PSDB; AAV24033.
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15-NOV-1994;
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                         (HANB/)
                                                                           (HALL/)
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                      HAN B.
SHORS E C.
                                                                        WU L.
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                                                                                                    HALL F L.
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94WO-US013181.
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Pred. No. 6.1e-07;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    fragment.
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence represents a bone morphogenetic protein active fragment, that was used in the creation of the bone morphogenetic fusion proteins of the invention. The bone morphogenetic fusion protein may contain some or all of the following elements: a purification tag, a proteinase site, an ECM/bone binding site, a second proteinase site, and a bone morphogenetic protein active fragment. The fusion proteins of the invention also includes proteins that have transforming growth factor beta active fragments instead of bone morphogenetic protein active fragments. The bone morphogenetic fusion proteins can be used for enhancing wound healing or bone growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New bone morphogenetic fusion proteins - comprising a purification and a bone morphogenetic active fragment, used for enhancing wound healing or bone growth.
                                                                                                                                                                                                                                                                                                                                                                                        Cystic kidney disease; renal; therapeutic; osteogenic protein; bone morphogenic protein; BMP; growth factor-beta superfamily; polycystic kidney disease; multicystic dysplastic kidney disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 14; Page 51-52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nimni ME,
The invention relates to methods for treating cystic kidney diseases. The method comprises administering an effective amount of a renal therapeutic agent or a polynucleotide encoding the therapeutic agent. The therapeutic
                                                           Claim 4;
                                                                                                  Treating cystic kidney disease - using renal therapeutic agents or sequences encoding them, especially from the osteogenic protein/bone
                                                                                                                                              WPI; 1999-070084/06
                                                                                                                                                                                                                                  07-MAY-1997;
                                                                                                                                                                                                                                                           06-MAY-1998;
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                                                                                      morphogenic
                                                                                                                                                                                                     (BIOJ ) BIOGEN
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DB; AAV99383.
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                                                                                                                                                                                                                                                                                                                                                                             medullary
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                                                                                        encoding them, esplic protein family.
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ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                osteogenic protein 1 (OP1) (residues 293-431).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first
                                                                                                                                                                           Harris
                                                                                                                                                                                                      INC.
                                                         67pp; English
                                                                                                                                                                                                                                  97US-0045909P
                                                                                                                                                                                                                                                             98WO-US009268
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                                                                                                                                                                                                                                                                                                                                                                          cystic disease; human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             entry
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 111; DB 2; L
Pred. No. 6.1e-07;
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RESULT 54
AAY70755
ID AAY7
XX AAY
AC AAY7
XX Matu
XX Matu
XX Mone
KW tran
KW prev
KW tran
KW myos
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cc agent is preferably a soluble or membrane bound polypeptide, e.g. a comember of the osteogenic protein/bone morphogenic protein (OP/BNP) family croteins a transforming growth factor-beta superfamily of proteins. It is cespecially one of the polypeptides hop1, hop1-pp, Op1-18Ser, OP5, OP7, CC Op1-16Ser, OP1-16Leu, OP1-16Met, OP1-16Ala, OP1-16Val, mOP1-mP, OP7, CC Op1-16Ser, OP1-16Leu, OP1-16Met, OP1-16Ala, OP1-16Val, mOP1-mP, OP7, OP7, CC Op1-16Ser, OP1-16Leu, OP1-16Met, OP1-16Ala, OP1-16Val, mOP1-PP, OP2-PP, hop2-Arg, or hop2-PP, hop2-Arg, or hop2-Ser or their CC biologically active homologues. The method is used to treat humans CC (infantile) polycystic disease, multicystic dysplastic kidney disease, curaemic medullary cystic disease, multicystic dysplastic kidney disease, corrected to the invention. Note: This sequence represents a mature human osteogenic CC the invention. Note: This sequence is not provided in the specification. CC It has been derived from the human OP1 sequence (AAW95448) obtained from CC U.S. Patent No. 5,266,683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bone morphogenetic protein; BMP-7; human; MP52; TGF-beta superfamily; transforming growth factor-beta; antagonist; cytostatic; osteopathic; prevention; ossification; metabolic bone disease; calcification; bone therapy; tumour; cartilage; osteogenic; Paget's disease; screening; myositis ossificans; arterial sclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 139 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY70755;
                                                                                                                                                                         Misc-difference
                                                                                                                                                                                                                             Misc-difference
                                                                                                                                                                                                                                                                               Binding-site
                                                                                                                                                                                                                                                                                                                Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                     Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Binding-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mature modified human BMP-7 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY70755 standard;
                                                                                                                                                                                                                                                                                                                                                   Modified-site
                                                                                                         WO200021998-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens.
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                                                                                                                                                                                                                                          80. .97

/label= Receptor_binding_site
/note= "Composed of two vicinal"
                                                                                                                                                                                                                                                                                                                                                                  /note= "Met of mature human MP52
is replaced with Leu"
                                                                                                                                                                                                                                                                                                                                                                                                                    /label= Receptor_binding_site
/note= "Composed of two vicinal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                        /note= "Met of mature human is replaced with Val"
                                                                                                                                                                                                                                                                                                /note=
                                                                                                                                                                                                                                                                                                                                 /note= "Allylsulphenylated
                                                                                                                                      note= "Met of mature s replaced with Ile"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein; 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                                                                                              "Allylsulphenylated Trp'
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 111; DB 2;
Pred. No. 6.1e-07;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                           human
                                                                                                                                                                                                                                                                                                                                   Trp"
                                                                                                                                                                                                              MP52
                                                                                                                                                           MP52
                                                                                                                                                                                                                                                peptide
                                                                                                                                                                                                                                                                                                                                                                                                                        peptide regions"
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                                                                                                                                                                                                                                                                                                                                                                                     protein at position
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09-OCT-1998; 04-OCT-1999; 20-APR-2000

99WO-IB001621. 98JP-00288103

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cc belongs to the bone morphogenetic protein (BMP) family. Modification or c replacement of Met at locations 30, 71, 74 and Trp at positions 32, 35 of ct the meature MPS2 protein to a hydrophilic or polar amino acid residue by c chemical modification, yields a mature protein having an antagonistic c activity against BMP. The modified sequence functions as an antagonist of come morphogenetic activity, that has cytostatic and osteopathic c c activity. This antagonist is useful for prevention and therapy of ectopic c cossification or metabolic diseases with calcification. It is used for c treatment of tumours in the bone and cartilage and metabolic bone c diseases such as Paget's disease. It is effective in suppressing symptoms of ossification of posterior longitudinal ligament, ectopic ossification consistent of operation, traumatic myositis ossificans, cossification by defect of oxygen supply, osteogenic tumour and arterial c sclerosis. It can be used as a reagent for screening agents which compete c with BMP and for receptor binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 20
A biologically active TGF-beta family member fusion protein competent refold, comprising a C-terminal linked TGF-beta family protein.
                                                                                                                                                07-OCT-1998;
16-AUG-1999;
                                                   WPI; 2000-303743/26.
                                                                                                                                                                                                 07-OCT-1999;
                                                                                                                                                                                                                                                               WO200020449-A2
                                                                                                                                                                                                                                                                                                                             finger 2 subdomain; BMP; TGF-beta family; protein refolding; OP-1;
fusion protein; osteopathic; antibacterial; cytostatic; mutant.
                                                                                                                                                                                                                                                                                                                                                                             Mature mutant OP-1 construct H2223.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bone morphogenetic protein antagonist useful for prevention and treatment of ectopic ossification and metabolic diseases with calcification, is obtained by chemical modification or genetic engineering.
                                                                                                                                                                                                                                13-APR-2000
                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                              10-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY92594;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY92594 standard; protein; 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 9; Page 35; 40pp; English.
                                                                                                                 (STYC ) STRYKER CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence is the modified mature human BMP-7 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (HMRI ) HOECHST MARION ROUSSEL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INPETVEKECCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                              (first
                                                                                 Tai M,
                                                                                                                                                98US-0103418P
99US-00375333
                                                                                                                                                                                                 99WO-US023372
                                                                                                                                                                                                                                                                                                                                                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                 Mccartney J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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RESULT 56
AAB09547
ID AAB09
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 20
                           Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.
                                                                                                                                                                                                                                                                                                                                                                                                                         Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental tissue; connective tissue; cartilage; vulnerary; mutant; mutein.
                                                                                                                    WPI; 2000-303787/26
                                                                                                                                                                                                                      07-OCT-1998;
16-AUG-1999;
                                                                                                                                                                                                                                                                         07-OCT-1999;
                                                                                                                                                                                                                                                                                                                                             WO200020607-A2
                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-SEP-2000
                                                                                                                                                   Oppermann H,
                                                                                                                                                                                                                                                                                                          13-APR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mature OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB09547;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAB09547 standard; protein; 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 139
                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
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                                                                                                                                                                                    (STYC ) STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mutant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
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                                                                                                                                                     Tai M,
                                                                                                                                                                                                                    98US-0103418P
99US-00374958
                                                                                                                                                                                                                                                                         99WO-US023371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein H2223, SEQ ID NO:68.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
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Pred. No. 6.1e-07;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 139;
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Claim 51; Page 155; 162pp; English

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The invention relates to mutant TGF-beta (transforming growth factor-
CC beta) superfamily members. These mutants comprise one or more amino acid
CC substitutions in the base region of the finger 2 subdomain, and a C-
CC terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger
CC subdomain, basic residues (e.g., Arg, Lys), or residues containing an
CC amide group (e.g., Gln, Asn) are substituted with acidic residues (e.g.,
CC Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-
CC proteins such as the osteogenic proteins (Ope), bone morphogenetic
CC proteins (SMPs), growth/differentiation factors (GDFs) and inhibins.
CC inducing tissue morphogenesis in bone, non-mineralised skeletal tissue,
CC inducing tissue morphogenesis in bone, non-mineralised skeletal tissue,
CC collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone,
CC collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone,
CC collagen and/or other mineralised skeletal or connective tissue statistile materix e.g.,
CC collagen tissue and to prevent or substantially inhibit
CC inturvertebral discs. The Op-1 mutants can be used to repair diseased or
CC damaged mammalian tissue and to prevent or substantially inhibit
CC inturverties in a pH range of 6-9, increased solubility in aqueous solution
CC and improved stability and/or activity. Sequences AB09547-B09548 and
CC protein-1 (Op-1)
CC protesin-1 (Op-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Morphogen; bone formation; modulation; endochondral; OP-1; OP-2; DPP; transforming growth factor; TGF-beta; osteogenic protein; BMP2; Vgr-1; GDF-1; 60A protein; screening assay; modulate; therapeutic; cell death
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human osteogenic protein (hOP-1) mature protein sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY57218 standard; protein; 139 AA
                                                                      (CREA-) CREATIVE BIOMOLECULES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS 113
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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                                                                                                                                             91US-00667274.
91US-00752764.
91US-00752861.
92US-00938021.
94US-00278729.
95US-00451953.
                                                                                                                                                                                                                                                                                                                                                                                                                                 97US-00912088
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Pred. No. 6.1e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
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RESULT 58
AAB02813
ID AAB02
XX AAB02
XX AAB02
XX Tumou
DE Human
XX Tumou
XW Done
KW Cissu
XX Homo
OS Synth
XX W0200
XX W0200
XX W0200
XX I Homo
XX I Homo
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                                         Oppermann
                                                                                                                                                                                                07-OCT-1998;
16-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-AUG-2000
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                                                                                                                                                                                                                                                                                                                    07-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                           13-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200020591-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
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                                                                                                                    (STYC ) STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sapiens.
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Query Match Best Local Matches

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Similarity

Sequence 139

AA;

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a mammalian cell with a compound that modulates morphogen expression in cepithelial cells identified in an assay for bone formation. The method cuses a protein that induces endochondral bone formation such as Op-1, a comphogenic protein which is a member of the transforming growth factor (1967-beta) superfamily. Other morphogens useful in the invention are osteogenic proteins (Op-1, op-2 and CEMP2) and related proteins such as DPP, Vgr-1, GDF-1 and the 60A protein. The method is used as a screening a marphogen. The method allows the determination of substances useful in therapeutic treatments to modulate (stimulate or depress) morphogen expression and/or secretion in disease treatment. Compounds can be concentration of a morphogen. Compounds which can be screened for their ability to modulate the effective systemic or local concentration of a morphogen. Compounds which can be screened include chemicals, biological response molecules such as lymphokines, cytokines, formones or vitamins, plant extracts, microbial broths and extract mediums conditioned by eukaryotic cells, body fluids or tissue extracts. The assay has few steps and is easy to carry out producing results condically. Drugs which result in cell death are easy to identify. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Screening assay useful modulate expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Col 35-36; 48pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention provides a method for altering expression of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a morphogen
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a morphogen in
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Tumour growth factor beta; TGF-beta; morphogenic protein; BMP; OP; bone morphogenic protein; osteogenic protein; mutant; modified; finger 2 sub-domain; finger 1 domain; heel domain; chimeric protein osteogenic; proliferative; antiinflammatory; tissue morphogenesis;
                                                                                                                                                                                                                                                                                                                                                                                                Human mature H2223 mutant amino acid sequence SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB02813 standard; protein; 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
98US-0103418P.
99US-00374936.
                                                                 99WO-US023370
                                                                                                                                                                                                                                                             regeneration; proliferation; differentiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 111; DB 3;
100.0%; Pred. No. 6.1e-07;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               113
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                                                                                                                                                                                                                                                                                                           protein;
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RESULT 57
AAY57218
IID AAY57218
AC AAY57
XX AC AAY57
XX MOTEN
DT 06-M2
XX MOTEN
COS HOMO
COS HOMO
XX US599
XX US599
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Homo

sapiens

11-MAR-1991; 30-AUG-1991; 30-AUG-1991; 28-AUG-1992; 20-JUL-1994;

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Kuberasampath

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Rueger DC,

Pang

Mccartney J;

15-AUG-1997; 30-NOV-1999. US5994131-A.

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RESULT 59
AAM51924
ID AAM51
XX
AC AAM51
XX
\begin{array}{c} \mathsf{CC} \times \mathsf{X} \times \mathsf{CP} \\ \mathsf{CC} \times \mathsf{X} \times \mathsf{CP} \\ \mathsf{CC} \times \mathsf{CC} \end{array}
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes a tumour growth factor beta (TGF-beta) superfamily chimeric protein (I) derived from at least 2 different members of the superfamily comprising a dimer with one monomer that contains a finger 2 domain derived from a first family member and a finger 1 domain and heel domain, both derived from a second family member. The monomer further comprises a conserved C-terminal cysteine skeleton. (I) has osteogenic, proliferative and antiinflammatory activities. The TGF-beta superfamily chimeric proteins (I) are useful for inducing tissue morphogenesis (i.e. molecules capable of tissue repair and regeneration and/or inhibiting inflammation) in bone, non-mineralised skeletal tissue, dental tissue, connective tissue, brain, liver and nerve and for inducing the proliferation and differentiation of uncommitted progenitor cells in a tissue-specific manner to support new tissue formation. AAA29887 to AAA29887 and AAB02748 to AAB2824 represent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel TGF-beta superfamily mutant chimeric protein, useful for inducing tissue morphogenesis in e.g. bone, comprises a dimer consisting of one monomer containing domains from two family members.
                                                                                   New mutein of transforming for treating or preventing
                                                                                                                                          WPI; 2002-042559/06
                                                                                                                                                                                                                                                30-MAY-2000; 2000DE-01026713
                                                                                                                                                                                                                                                                                                                                                                                                                            Human; TGFbeta; transforming growth factor beta; mutant; antagonist; agonist; ectopic bone formation; psoriasis; muscular atrophy; scar; formation; fibrosis; cirrhosis; osteopathic; antipsoriatic; antifibro hepatotropic; vulnerary; BMP7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human TGFbeta protein superfamily protein BMP7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAM51924 standard; protein; 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 139 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 142; 149pp; English.
                              Example 1; Fig 1; 54pp;
                                                                    receptor binding.
                                                                                                                                                                          Sebald W, Nickel J;
                                                                                                                                                                                                                                                                                    30-MAY-2000; 2000DE-01026713
                                                                                                                                                                                                                                                                                                                                                          DE10026713-A1
                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sequences used in the exemplification of the present invention
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                                  German.
                                                                                 growth factor-beta e.g. ectopic bone f
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Pred. No. 6.1e-07;
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                                                                                       formation,
                                                                                                    superfamily protein,
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                                                                                         The invention relates to a novel human polynucleotide and the encoded polypeptide. A polynucleotide of the invention may have a use in gene therapy. An oligonucleotide of the invention ADM0202-ADM06773 is useful as a primer for synthesizing the polynucleotide or as a probe for detecting the polynucleotide. The polynucleotide or as a probe for useful in gene therapy, for developing a diagnostic marker or medicines for regulating their expression and activity, or as a target of gene therapy. The proteins ADM01359-ADM0201 encoded by the polynucleotides are useful as pharmaceutical agents. The present sequence represents are useful as pharmaceutical agents. The present sequence of the invention.
                                                                                                                                                                                                                                                                                                       New polynucleotides and polypeptides are useful in gene therapy, developing a diagnostic marker or medicines for regulating their expression and activity, or as a target of gene therapy.
                                                             Sequence 139 AA;
                                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 2783; 305pp; English
                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-723558/69.
N-PSDB; ADM01655.
                                                                                                                                                                                                                                                                                                                                                                                                                        Seki N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Isogai T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-MAR-2002; 2002JP-00137785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-APR-2002; 2002EP-00008400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-SEP-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human; gene therapy; diagnostic marker; pharmaceutical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (REAS-) RES ASSOC BIOTECHNOLOGY.
                                                                                                                                                                                                                                                                                                                                                                                                                                         lamamoto
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                                                                                                                                                                                                                                                                                                                                                                                                                        Yoshikawa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INPETVPKPCCAPTQLNAIS 113
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Sugiyama T,
, Isono Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; ilarity 100.0%; Conservative
100.0%; llarity 100.0%; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein; 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   invention
                                                                                                                                                                                                                                                                                                                                                                                                                     Otsuki T, Wakamatsu A,
Hio Y, Otsuka K, Nagai
Otsuka M, Nagahari K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
Score 111; DB 7;
Pred. No. 6.1e-07;
; Mismatches 0;
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Pred. No. 6.1e-07;
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Masuho
                              Length 139;
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K, Irie R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 139;
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INPETVPKPCCAPTQLNAIS 20

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                This invention relates to a novel method for treating or preventing CC chronic renal failure and other associated mammalian renal disorders. CC specifically, it refers to cojointly administering osteogenic protein CC (OP) or bone morphogenetic protein (BMP) morphogens with an angiotensin (CC or bone morphogenetic protein (BMP) morphogens with an angiotensin II CC receptor antagonist/ blocker (AIIRA). The present invention describes consing these compositions as inducers of proliferation and differentiation of renal tissue, and as such can be used to prevent, inhibit, delay or CC alleviate the progressive loss of renal function and the decline in CC glomerular filtration rate (GFR) characterised by chronic renal failure. CC glomerular filtration rate (GFR) characterised by chronic renal failure. CC cornic disease (ESRD), chronic diabetic nephropathy, diabetic cental hypertrophy, hypertensive nephrosclerosis, hereditary comparises and renal dysplasia where the mammal is a kidney transplant concritions and creating captible and renal dysplasia where the mammal is a kidney transplant.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Treating or preventing chronic renal failure in mammal, comprises conjointly administering osteogenic proteins/bone morphogenetic pmorphogen and angiotensin-converting enzyme inhibitor to mammal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 bone morphogenetic protein; BMP; morphogen; angiotensin-converting enzyme inhibitor; ACE; angiotensin II receptor antagonist; AIIRA; er
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human osteogenic protein 1 morphogen SeqID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; SEQ ID NO 1; 365pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Charette MF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-AUG-2002; 2002US-0406431P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antiinflammatory; vasotropic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   chronic diabetic nephropathy; diabetic glomerulopathy; diabetic renal hypertrophy; hypertensive nephrosclerosis; hypertensive glomerulonephritis; hypertensive glomerulonephritis; hereditary nephritis; renal dysplasia; antidiabetic; nephrotropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human; chronic renal failure;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (CURI-) CURIS INC. (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62
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l. This sequence represents a human BMP polypeptice of the inve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2004-282635/26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INPETVEKECCAPTOLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hruska KA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mccartney J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
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Pred. No. 6.1e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 renal disorder; osteogenic protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        disease; ESRD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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28-JAN-2002; 06-FEB-2002; 15-FEB-2002;

New bone morphogenic protein polypeptides and polynucleotides, useful diagnosing, preventing, treating or ameliorating a medical condition, e.g. diabetes, dyslipidemia, hypertension, coronary artery disease or

for

Claim 1; SEQ

ID NO 63; 224pp; English

WPI;

2004-022075/02

Young (RUBE/) (/NDOA) 16-JAN-2003;

PE,

Ruben SM

YOUNG RUBEN

ט ש **3** m 16-MAR-2001; 23-MAR-2001; 17-JAN-2002;

22-JAN-2002;

2001WO-US009229. 2002US-0348621P. 2002US-0349356P. 2002US-0351520P. 2002US-0351520P. 2002US-0356749P.

2003US-00345236

17-MAR-2000;

2000US-0190067P. 2001US-00809269.

14-FEB-2003; 2003US-00366345

04-DEC-2003.

US2003224501-A1 Homo sapiens inflammation; aberrant

liver disorder; cartilage growth disorder; bone (inflammation; aberrant cell growth; liver cancer

Human; bone morphogenic protein; BMP; weight gain; appetite suppression; fat mass reduction; cell sensitivity; glucose uptake; diabetes; insulin resistance; hyperglycaemia; hypertension; coronary artery disease; renal failure; neuropathy; metabolic disorder; glucose metabolism disorder; endocrine disorder; obesity; weight loss; liver disorder; cartilage growth disorder; bone growth disorder;

Human bone morphogenic protein (BMP) polypeptide #35

(first

ADH11607 standard; protein; 139

The invention relates to human bone morphogenic protein (BMP)
polypeptides and the polynucleotides encoding them. The invention also
crelates to a method for limiting weight gain, suppressing appetite or
reducing fat mass, comprising administering to a mammalian subject a
cherapeutic amount of a BMP polypeptide, and a method for increasing the
comprising contacting the cell with a BMP polypeptide. The BMP
comprising contacting the cell with a BMP polypeptide. The BMP
condition or a susceptibility to a pathological condition or a susceptibility to a pathological condition or a susceptibility to a pathological condition, a subject or
condition or a susceptibility to a pathological condition, coronary
condition or a susceptibility to a pathological condition, e.g.
condition or a susceptibility to a pathological condition, coronary
condition or a susceptibility to a pathological condition, coronary
condition or a susceptibility to a pathological condition, coronary
condition or assistance, hyperglycaemia, hypertension, coronary
conditions disorder, endocrine disorders, obesity, weight loss, liver
conditions disorder, endocrine disorders, obesity, weight loss, liver
conditions cartilage and bone growth disorders, inflammation or aberrant
conditions cartilage and bone growth disorders, inflammation or aberrant
conditions also useful for regulating nutritional partitioning,
cell growth such as liver cancer. The BMP polypeptides and
conditions are also useful for regulating nutritional partitioning,
cell imiting weight gain, suppressing appetite, reducing fat mass, increasing

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RESULT 64
AAW29295
ID AAW29
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AC AAW29
AC AAW29
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DT 20-AE
XX
DE Humar
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ADK72628
ID ADK72
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 139 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antiinflammatory and vasotropic activities. This polypeptide sequence a human osteogenic protein 1 of the invention.
Human osteogenic protein subunit D linked to pel B protein product
                                                                                                                                               Sequence 141 AA;
                                                                                                                                                             The present invention relates to preparing recombinant human bone morphogenetic protein-7 mature peptide dimer. The present sequency represents rh BMP-7 mature peptide.
                                                                                                                                                                                            Claim 1; SEQ ID NO 2; 11pp; Chinese.
                                                                                                                                                                                                           Method for preparing recombinant human bone morphogenetic protein-7 mature peptide dimer.
                                                                                                                                                                                                                                   WPI; 2004-000155/01.
N-PSDB; ADK72627.
                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                          rh BMP-7 mature peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                       ADK72628 standard; protein; 141
               20-APR-1998
                              AAW29295;
                                             AAW29295 standard; protein; 161
                                                                                                                                                                                                                                                          Xu F,
                                                                                                                                                                                                                                                                                        12-OCT-2001; 2001CN-00135658
                                                                                                                                                                                                                                                                                                       12-OCT-2001; 2001CN-00135658
                                                                                                                                                                                                                                                                                                                       23-APR-2003
                                                                                                                                                                                                                                                                                                                                     CN1412200-A.
                                                                                                                                                                                                                                                                                                                                                                   rh BMP-7 mature
                                                                                                                                                                                                                                                                                                                                                                           human bone morphogenetic protein-7
                                                                                                                                                                                                                                                                                                                                                                                                         06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                        ADK72628;
                                                                                                                                                                                                                                                                         (GENE-) INST GENE TECHNOLOGY HANGZHOU HUADONG ME.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20;
                                                                                                 1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                  20;
                                                                                                                                                                                                                                                         Zheng Z;
                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INPETVPKPCCAPTQLNAIS 113
                                                                                   INPETVPKPCCAPTQLNAIS 114
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ilarity 100.0%;
Conservative 0
                                                                                                                  Conservative
              (first entry)
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                                                                                                                                                                                                                                                                                                                                                                   peptide.
                                                                                                                        100.0%;
                                                                                                                 0;
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                                                                                                                        Score 111; DB 8;
Pred. No. 6.2e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 111; DB 8;
Pred. No. 6.1e-07;
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                                                                                                                  Mismatches
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                                                                                                                                                                                                                                                                                                                                                                            mature
                                                                                                                                                                                                                                                                                                                                                                           peptide dimer;
                                                                                                                                                                       The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                 Length 141;
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                                                                                                                  Indels
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RESULT 65
AAB18757
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 20
Fusion protein expression; bactericidal permeability-increasing protein; BPI; antimicrobial; endotoxin binding agent; neutralizing agent; subunit D; osteogenic protein.
                                                                                                                        Subunit D of human osteogenic protein linked to a pelB leader sequence.
                                                                                                                                                                                                                                                                                                          AAB18757 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 161 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Recombinant production of bactericidal/permeability increasing protein -by expression as a fusion protein in microbial host cells, then cleaving the BPI peptide from the carrier.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1997-480215/44.
N-PSDB; AAT86333.
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                                                                                                                                                                                        22-JAN-2001
                                                                                                                                                                                                                                                    AAB18757;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 146-147; 186pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Better MD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-MAR-1996;
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Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-MAR-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9735009-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                INPETVPKPCCAPTQLNAIS 135
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ilarity 100.0%;
Conservative (
                                                                                                                                                                                        (first entry)
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                                                                                                                                                                                                                                                                                                          protein; 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 111; DB 2;
Pred. No. 7.1e-07;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 161;
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Synthetic

Homo

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25-MAR-2003
01-JUL-2002
06-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The specification describes an improved method for obtaining a peptide from bacterial cells after fusion protein expression in the cells. The method comprises treating the bacterial cells with acid to disrupt or lyse the cells and release the peptide from fusion protein, in a single step. The fusion protein comprises the peptide, and a carrier protein, with an acid-cleavable site between them. The method is useful for obtaining recombinant peptides such as bactericidal permeability-increasing protein (BPI)-derived peptides from bacterial cells. BPI-derived peptides having the activity of BPI are useful as antimicrobial agents, as endotoxin binding and neutralizing agents. The present sequence represents subunit D of a human osteogenic protein. It is linked to a peptide derived from BPI, and the construct used to produce vectors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Improved production of recombinant peptides from bacterial cells involves treating bacterial cells with acid to disrupt or lyse the cells and release the peptide from fusion protein.
                                              Osteogenic protein; bone; cartilage; matrix; osteoarthritis; repair; vascularisation; mineralisation; differentiation; ss.
                                                                                               Osteogenic
                                                                                                                                                                                              AAR44749;
                                                                                                                                                                                                                          AAR44749 standard; protein; 169
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Page 38-39; 53pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N-PSDB; AAA75797.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-602118/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Better MD,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-MAR-2000; 2000WO-US007148
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for use in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                         local
               sapiens
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                                                                                                                                                                                                                                                                                                                                                                           Similarity
20; Conser
                                                                                                                                                                                                                                                                                                           INPETVPKPCCAPTQLNAIS
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                                                                                             fusion
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                                                                                                                          (revised)
(revised)
(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       carotovorum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "pelB leader sequence
of Erwinia carotovora"
23 . .161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "subunit D of human osteogenic protein"
                                                                                             protein OP1A.
                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                         Score 111; DB 3;
Pred: No. 7.1e-07;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     from the
                                                                                                                                                                                                                                                                                                                                                                                                         Length 161;
                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pectate lyase gene
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RESULT 67
AAR85765
ID AAR85
XX
AC AAR85
XX
DT 25-MA
DT 20-JU
XX
OP1A
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                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                        vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-UUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                        The fusion protein comprises substantially all of the mature form of OP1 (AAR44746, residues 326-431) linked by an Asp-Pro cleavage site to a leader sequence suitable for promoting expression in E. coli. The protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including
 OP1A fusion
                                                                                                                                                                                                                                                                                                                           Sequence 169 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New pure mammalian osteogenic proteins - induce cartilage and endochondral bone formation when in association with a matrix.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1993-395405/49.
N-PSDB; AAQ53145.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Key
                                25-MAR-2003
20-JUN-1996
                                                                                 AAR85765;
                                                                                                              AAR85765 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Col 99-100; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-DEC-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-APR-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US5266683-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (STYC ) STRYKER CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        L8-OCT-1990
                                                                                                                                                                                            124 INPETVPKPCCAPTQLNAIS 143
                                                                                                                                                                                                                           1 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                           h 100.0%; Score 111; DB 2; Similarity 100.0%; Pred. No. 7.4e-07; 20; Conservative 0; Mismatches 0;
protein encoded
                                (revised)
(first en
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       T, Ozkaynak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90US-00579865.
90US-00599543.
90US-00600024.
90US-00616374.
90US-00621849.
90US-00621988.
91US-00660162.
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90US-00483913.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         92US-00841646
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /label= Leader sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'note= "Substantial fragment
                                                                                                              protein;
                                entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .169
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 by OP1(a)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RHL,
                                                                                                                                                                                                                                                                                            Length 169;
                                                                                                                                                                                                                                                                Indels
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                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein
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RESULT 66
AAR44749
ID AAR447
XX AAR44
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Matches Query Best I

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The sequences given in AAR85765-70 represent fusion proteins comprising CC fragments of human osteogenic proteins. The MLE leader sequence is CC suitable for promoting expression in E. coli. The genes were expressed in E. coli under the control of a synthetic Trp promoter-operator to produce Synthetic inclusion bodies. Constructs containing the Asp-Pro site were CC eleaved with acid. The resulting products were purified, refolded and CC allowed to dimerise. The proteins had osteogenic activity when properly folded and dimerised. Antisera were produced against the purified corteogenic proteins. The antibodies had binding specificities for costeogenic proteins. The antibodies are capable of binding specifically costeogenic proteins, such as these, may be used in purification correct acquired and congenital cranofacial and other skeletal or dental canomalies. They may be used to induce local endochrondral bone formation firactures and in other clinical applications is required.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; osteogenic protein; hOP-1; murine; mOP-1; TGF-beta superfamily; transforming growth factor-beta; dimer; antibody; epitope; hippocampus; purification; implantable osteogenic device; bone formation; cranofacial; anomaly; skeletal; dental; endochrondral bone formation; MLE leader; non-union fracture; cartilage repair; osteoarthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cleavage-site
                                                                                                                                                                                                                                                                                     purification of
                                                                                                                                                                                                                                                                                        Antibodies with osteogenic protein binding specificity - used in purification of osteogenic proteins, and as antigenic proteins.
                                                                                                                                                                                                                                                                                                                                  N-PSDB; AAT02605.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-APR-1988;
15-AUG-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Escherichia coli.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                              Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                        (STYC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-NOV-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-FEB-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-FEB-1989;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                1996-010159/01.
                                                                                                                                                                                                                                                                                                                                                                                                       STRYKER CORP.
                                                                                                                                                                                                                                                             Col 99-100; 129pp; English
                                                                                                                                                                                                                                                                                                                                                                             Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                90US-00621849.
90US-00621988.
91US-00660162.
91US-00810560.
92US-00827052.
92US-00841646.
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89US-00422613.
89US-00422699.
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-Sno6
-Sno6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "Asp-Pro acid cleavage site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "MLE leader peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note= "Probably
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3-00422613.

3-004822699.

3-005699213.

3-005699265.

3-006599543.

3-0066163744.

3-0066163744.

3-0066163744.
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                                                                                                                                                                                                                                                                                                                                                                             Oppermann
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            due to a cloning
                                                                                                                                                                                                                                                                                                                                                                             Ozkaynak
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RESULT 68

RESULT 68

REAGA 4305

ID ANW44305

REAGA 4305

REAGA 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                 04-DEC-1990;
22-FEB-1991;
20-DEC-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Other potential applications include cartilage repair, e.g. in treatment of osteoarthritis. (Updated on 25-MAR-2003 to correct field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-NOV-1990;
04-DEC-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human osteogenic fusion protein OPIA
                                                                                                                                                                                                                           N-PSDB; AAV15208.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-OCT-1989;
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23-FEB-1989;
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                                                                                                                                                                                                                                                 WPI; 1998-158353/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-OCT-:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-FEB-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; osteogenic fusion protein; subunit; endochondral bone formation;
                                                                                                                                                                                                                                                                                                                                 STYC )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         iomo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               83
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            124
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                                                                                                                                                                                                                                                                                                                                 STRYKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      recombinant protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INPETVEKECCAPTOLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           169 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                      Rueger DC,
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92US-00841646.
93US-00147023.
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90US-00621988.
91US-00660162.
91US-00810560.
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89US-00422613.
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                                                                                                                                                                                                                                                                                                                                 CORP.
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-00483913.
-00569920.
-00579865.
-00599543.
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                                                                                                                                                                                                                                                                                          Kuberasampath
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Pred. No. 7.4e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                          H,
                                                                                                                                                                                                                                                                                        Oppermann
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for novel protein(s)

Extraction of osteogenic protein from mixture - u for novel polypeptide chains useful as subunit(s)

using antibodies specific s) of dimeric osteogenic

Disclosure; Col

97-98;

127pp; English

The present sequence represents a human osteogenic fusion protein, which is used in the present invention. The present invention describes methods for selectively extracting an osteogenic protein (OP) from a mixture. The method comprises: (a) exposing the mixture to an antibody that

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Best Local S
Matches 20
                                                                                                                                       08-APR-1988
15-AUG-1988
23-FEB-1989
17-OCT-1989
17-OCT-1989
22-FEB-1990
20-AUG-1990
20-AUG-1990
18-OCT-1990
18-OCT-1990
04-DEC-1990
04-DEC-1990
04-DEC-1990
04-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    specifically binds OP, separating the resulting antibody-protein complex from the mixture, and dissociating the complex. In the methods OP comprises a pair of oxidised subunits that are disulphide-bonded to form a dimer, and one of the subunits has an amino acid (aa) sequence sufficiently homologous to residues 335-431 of a 431 aa protein designated OPS, sequence given in the specification. In dimeric form OP is capable of inducing cartilage and endochondral bone formation in a mammal when disposed within a matrix implanted in the mammal. The methods are used for recovering the recombinant proteins from cell cultures
                                                                                                         20-DEC-1991;
28-JAN-1992;
21-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                  cartilage;
non-union 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-MAR-2003
24-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 169
                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAW89682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW89682 standard; protein; 169 AA
                                                                                                                                                                                                                                                                                                          23-MAY-1995;
                                                                                                                                                                                                                                                                                                                              26-JAN-1999
                                                                                                                                                                                                                                                                                                                                                   US5863758-A
                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                        osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INPETVPKPCCAPTQLNAIS 143
                                                                                                                                                                                                                                                                                                                                                                                                        fracture; osteoart
ow differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              fusion
                                                                                                                                                                                                                                                                                                                                                                                                                              craniofacial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (revised)
(first entry)
                                                                                               90US-00579865.
90US-0059543.
90US-0060024.
90US-00616374.
90US-00621984.
90US-00621988.
91US-00660162.
91US-00810560.
92US-00810560.
92US-00847052.
93US-00847052.
                                                                                                                                                                                                                    89US-00422613.
89US-00422699.
90US-00483913.
90US-00569920.
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88US-00232630.
89US-00315342.
                                                                                                                                                                                                                                                                                                          95US-00449700
                                                                                                                                                                                                                                                                                                                                                                                                               protein; OP-1; OPX; endochondral bone formation; facial defect; skeletal disorder; dental disorder; e; osteoarthritis; vascularisation; mineralisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
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Pred. No. 7.4e-07;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
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to induce cartilage and bone formation when implanted in matrix, useful
                                                                               for
                                                                               repairing bone
                                                                                defects.
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Disclosure; Col 97-98; 127pp; English

CC The present invention describes isolated DNA (I) encoding at least one osteogenically active region of human osteogenic protein-1 in prepro form (CC (OP1-PP), murine OP1-PP, murine OP2-PP or human OP2-PP. Also described care: (A) DNA related to (I) encoding a polypeptide able to form dimers that can induce cartilage and endochondral bone formation in a mammal CC when implanted in a matrix; (B) vectors containing (I) or related DNA; (CC (C) host cells transformed with this vector; (D) DNA (I') encoding a prepro- or pro-OP1, and related vectors and transformed mammal and cortical segment of the sequence mammal cc esteogenic protein (II) produced by expression of transformed mammalian CC cells, able to induce bone and cartilage formation; (F) mature OP1 cc escreted from mammalian cells following expression of the sequence that compose hop1-PP; and (G) production of an active osteogenic composition by truncating mature OP1 protein host cells of (C) are used to produce composition of acquired or congenital craniofacial defects or other skeletal or cc dental disorders; to heal non-union fractures; to repair cartilage, e.g. in osteoarthritis, or generally wherever bone formation is required. The protein sinduce complete development of endochondral bone, including cresent sequence represents an osteogenic fusion protein OPIA. (Updated CC vascularisation, mineralisation and sequence fusion protein OPIA. (Updated CC on 20-MAR-2003 to correct PA field.) Sequence 169 form

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Query Match
Best Local S
Matches 20
124
                Н
                                 l Similarity
20; Conserv
INPETVPKPCCAPTQLNAIS
          INPETVPKPCCAPTQLNAIS
                                100.0%; ilarity 100.0%; Conservative 0
                                  0;
143
                                           Score 111; DB 2;
Pred. No. 7.4e-07;
                20
                                  Mismatches
                                   0
                                                  Length
                                   Indels
                                  0
                                  Gaps
                                    0
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AA,

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Osteogenic protein OPIA fusion protein sequence.
                                         16-DEC-1999
                                                                              AAY43116;
                                                                                                                standard; protein; 169
                                       (first entry)
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Chondrogenic protein; biodegradable matrix; cell proliferation; cell differentiation; migratory progenitor cell; cartilage formatiallogenic implant; xenogenic implant; endochondral bone formation; Synthetic osteogenic protein. formation;

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RESULT 70
AAY43116
ID AAY43
AC AAY44
AC
                                                                                                                                                                                                                                                                      08-APR-1988;
15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
                                                                           20-AUG-1990;
07-SEP-1990;
18-OCT-1990;
18-OCT-1990;
                                                                                                                                                                                                                                             22-FEB-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US5958441-A
                                                                                                                                                          90US-00483913.
90US-00569920.
90US-00579865.
                                                                                                                                                                                                                                                                                                                                                          88US-00179406.
88US-00232630.
89US-00315342.
                                         90US-00599543.
90US-00600024.
90US-00616374.
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89US-00422699
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Nucleic acid encoding

mammalian

osteogenic

proteins

į'n

prepro

form

able

N-PSDB;

1999-131303/11. DB; AAX00233.

(STYC)

STRYKER CORP

RHL,

Rueger DC,

Kuberasampath

Ή

Oppermann

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Ozkaynak E

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RESULT 71
ADJ62684
ID ADJ67
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Matches
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22-FEB-1990;
20-AUG-1990;
07-SEP-1990;
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21-FEB-1992;
22-DEC-1992;
01-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-DEC-1990;
22-FEB-1991;
20-DEC-1991;
                                    17-OCT-1989;
17-OCT-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This sequence is an osteogenic protein IA (OPIA) fusion protein. The invention relates to a device for implantation in a mammal comprising a chondrogenic protein (I) dispersed within a biocompatible, in vivo degradable matrix defining pores which permits the influx, proliferation and differentiation of migratory progenitor cells, where (I) comprises a substantially pure protein with the amino acid sequence VPKPCCAPT, which is capable of inducing cartilage formation. The device is used as an allogenic or xenogenic implant for the induction endochondral bone formation in mammals
                                                                                   08-APR-1988;
15-AUG-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Implant for mammals permitting the influx, proliferation and differentiation of migratory progenitor cells, useful for inducing endochondral bone formation in mammals.
                                                                                                                       04-SEP-1998;
                                                                                                                                                                      US6551995-B1
                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                       vascularisation;
                                                                                                                                                                                                                               human; osteogenic
endochondral bone
                                                                                                                                                                                                                                                                                               06-MAY-2004
                                                                                                                                                                                                                                                                                                                      ADJ62684;
                                                                        23-FEB-1989,
                                                                                                                                                22-APR-2003
                                                                                                                                                                                                                                                                      Human
                                                                                                                                                                                                                                                                                                                                              ADJ62684 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (STYC ) STRYKER BIOTECH CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
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DB; AAZZ7584.
                                                                                                                                                                                                                                                                                                                                                                                                         124 INPETVPKPCCAPTQLNAIS 143
                                                                                                                                                                                                                                                                     osteogenic protein 1A,
                                                                                                                                                                                                                                                                                                                                                                                                                                 ۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ch 100.0%; l Similarity 100.0%; 20; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                         INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Col 95-97; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pang RHL,
                                                                                                                                                                                                                                                                                             (first entry)
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89US-00422613.

89US-00422623.

89US-00422699.

90US-00483913.

90US-00569920.

90US-00579865.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              90US-00621988.
91US-00660162.
91US-00810560.
92US-00827052.
92US-00827052.
92US-00841646.
92US-00995345.
93US-00147023.
                                                                                   88US-00179406
88US-00232630
                                                                                                                       98US-00148925
                                                                        89US-00315342.
                                                                                                                                                                                                                     c protein 1; OP1A; osteogenic device;
e formation; bone repair; cartilage repair;
mineralisation; bone marrow differentiation.
                                                                                                                                                                                                                                                                                                                                            protein; 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                     OP1A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 111; DB 2;
Pred. No. 7.4e-07;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ozkaynak E,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
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Best Local S
Matches 20
                                                                                                                                             The invention relates to an osteogenic device for implantation in a mammal, comprising a ceramic or biodegradable non-collagen polymer matrix defining pores of a dimension sufficient to permit influx, differentiation and proliferation of migratory progenitor cells from the body of mammal, and a substantially pure osteogenic protein competent to induce endochondral bone formation when disposed in the matrix and implanted in mammal. The device is useful for producing endochondral bone formation in mammals, for bone and cartilage repair, for inducing the full developmental cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation at the locus of an implant when implanted in a mammalian body. The device is useful for bone formation in various orthopedic, periodontal and reconstructive procedures. The present sequence represents the amino acid sequence of human osteogenic protein 1A, OPIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-DEC-1991;
28-JAN-1992;
21-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
04-DEC-1990;
04-DEC-1990;
22-FEB-1991;
                                                                                                                  Sequence 169
                                                                                                                                                                                                                                                                                                                                                                            Disclosure; SEQ ID NO 9; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                       Osteogenic device useful for inducing endochondral bone formation in mammals, comprises ceramic or biodegradable non-collagen polymer matrix containing substantially pure natural-sourced mammalian osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oppermann H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (STYC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-NOV-1993
                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2003-575998/54
124
                                                           20;
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                    INPETVPKPCCAPTQLNAIS
INPETVPKPCCAPTOLNAIS
                                                           Conservative
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90US-00600024
90US-00616374
90US-00621849
90US-00621988
91US-0060162
91US-00810560
92US-00827052
92US-00841043
93US-00841043
93US-00841043
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                                                                        100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kuberasampath T,
                                                           0
                                                                        Score 111; DB 7;
Pred. No. 7.4e-07;
 143
                            20
                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rueger DC,
                                                             0
                                                                                        Length
                                                             Indels
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                                                             Gaps
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RESULT 72
ADE52755
ID ADE52
AC ADE52
XX ADE52
XX Endown Endowm Endown En
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human osteogenic protein, OP1A fusion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JAN-2004 (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADE52755 standard; protein; 169
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Human; osteogenic endochondral bone P1; CBMP2A; CBMP2B; osteogenic device; cartilage formation; non-union fractu

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Homo sapiens.
Escherichia coli
                                            Chimeric
                                                                                    cartilage repair;
                                                                                  protein; OP1; CBMP2A; CBMP2B; or formation; cartilage formation; dental reconstructive procedure
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.US2003069401-A1

10-APR-2003

20-AUG-1990; 18-OCT-1990; 18-OCT-1990; 18-OCT-1990; 21-NOV-1990; 04-DEC-1990;

04-DEC-22-FEB-20-DEC-

90US-00483913 90US-00569920 90US-00599543 90US-00600024 90US-00616374 90US-00621988 90US-00621988 91US-00621988 91US-00620560 92US-00827052 92US-00827052 92US-00827052 92US-00827052 92US-00847052

1991

28-JAN 21-FEB

(OPPE/)
(OZKA/)
(KUBE/)
(RUEG/)

OPPERMANN H.
OZKAYNAK E.
KUBERASAMPATH
RUEGER D C.
PANG R H L.

Η

Oppermann H,

Ozkaynak

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Kuberasampath

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Rueger

bc,

Pang RHL;

2004-008898/01

ADE52754.

08-APR-1988 15-AUG-1988 23-FEB-1989 17-OCT-1989 17-CCT-1989 22-FEB-1990

-S068 -S068 -S088 88US

-00315342 -00179406

-00422699 -00422613 24-OCT-1997;

97US-00957425

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DNA SEQ

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8888
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                       21-FEB-1992;
01-NOV-1993;
24-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                           08-APR-1988;
15-AUG-1988;
28-JAN-1992;
                                      The invention relates to an osteogenic device for implantation in mammal, comprising osteogenic protein dispersed within biocompatible matrix defining pores, differentiation, and proliferation of migratory progenitor cells from body of mammal, improvement where osteogenic protein comprises pair of unglycosylated protein chains disulfide bonded to produce dimeric species capable of inducing endochondral bone formation. The device is useful for inducing endochondral bone formation. The device is useful for inducing andochondral bone formation in a non-union fracture in a mammal, for inducing cartilage or endochondral bone formation in a mammal, for use in periodontal or dental reconstructive procedures, for use in cartilage repair in a mammal, for use in endochondral bone reconstructive procedures. The device is useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                endochondral bone formation periodontal reconstructive cartilage repair.
                                                                                                                                                                                                                               Osteogenic device for implantation in mammal comprising osteogenic protein dispersed within biocompatible matrix, osteogenic protein comprising pair of unglycosylated protein chains, inducing endochor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003224996-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human osteogenic protein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-JUN-2004
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                                                                                                                                                                                                                                                                                    N-PSDB;
                                                                                                                                                                                                                                                                                                                         Opperman
                                                                                                                                                                                                                                                                                                                                                                           04-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        human; osteogenic
                                                                                                                                                                                              Disclosure; SEQ ID
                                                                                                                                                                                                                                                                                                                                                    (STYC)
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                                                                                                                                                                                                                                                                                    2004-167144/16.
DB; ADM80492.
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                                                                                                                                                                                                                                                                                                                                                    STRYKER CORP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard;
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ilarity 100.0%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first
                                                                                                                                                                                                                                                                                                                          Ozkaynak
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93US-00147023.
95US-00449699.
98US-00148925.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          device; osteogenic protein; OP1A; biocom; formation; non-union fracture; cartilage
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                                                                                                                                                                                          9; 136pp; English
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Pred. No. 7.4e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 dental reconstructive
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                locus accessible to
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rtilage formation;
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endochondral
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osteogenic protein comprising a pair disulfide bonded to produce dimeric biocompatible matrix.

biocompatible

Disclosure; SEQ ID NO

9;

130pp; English

relates to an osteogenic device

for implantation in spersed within a

Osteogenic device for inducing endochondral bone formation, has osteogenic protein comprising a pair of unglycosylated protein chains disulfide bonded to produce dimeric species, dispersed within

Commandal, comprising osteogenic protein (OP) dispersed within a biocomparible, in vivo biodegradable matrix, where OP comprises a pair (CC (P) of unglycosylated protein chains disulphide bonded to produce dimeric celes having a conformation so that (P) is capable of inducing a concessible to the cells. Also included are substantially a pure mammal and capable of inducing a pair of unglycosylated polypeptide conditions and capable of inducing endochondral bone formation in association comprises peptides derived from human or mouse OP1), a DNA sequence cells and capable of inducing endochondral bone formation in association comprises peptides derived from human or mouse OP1), a DNA sequence cell capable of inducing endochondral bone formation in a comprise subunit of a dimeric osteogenic protein as defined above cell harbouring and capable of expressed from recombinant DNA in a host cell, a polypeptide chain useful cas a subunit of a dimeric osteogenic protein and an antibody (Ab) capable of binding specifically to an epitope on the osteogenic proteins. The costeogenic device is useful for inducing local cartilage and bone formation in a mammal, for inducing cartilage or endochondral bone formation in a mammal, for inducing endochondral bone formation in a mammal, for inducing cartilage repair in a mammal, in periodontal or dental reconstructive procedures, or in endochondral bone formation in a mammal, for inducing endochondral bone formation in a mammal, for inducing cartilage repair in a mammal, in the osteogenic protein are useful for cartilage repair in a mammal, in costeogenic protein are useful for antibody is useful for selectively capable of specifically binding to an epitope of the osteogenic protein with an E. coll leader sequence for heterologous expression. Note: The colains refer to regions of mouse and costeogenic device, which are functional in the osteogenic device, human osteogenic device, which are functional in the osteogenic device, endochondral would reconstructive procedures. The device is in endochondral bone reconstructive procedures. The device use in endochondral bone reconstructive procedures. The device for inducing cartilage or endochondral bond formation in a mammal for inducing cattleage or endochondral bond formation in a cacessible comprising the step of implanting the mammal at a locus accessible comprising the step of implanting the mammal at a locus accessible comprising the step of implanting the mammal at a locus accessible comprising the step of implanting the mammal at a locus accessible comprising the step of implanting the mammal at a locus accessible comprising the step of implanting the mammal at a locus accessible comprising the step of implanting the mammal at a locus accessible comprising the step of implanting the mammal at a locus accessible comprising the step of implanting the mammal at a locus accessible comprising the step of implanting the mammal at a locus accessible comprising the step of implanting the mammal at a locus accessible comprising the step of implanting the mammal at a locus accessible comprising the step of implanting the mammal at a locus accessible comprising the step of implanting the mammal at a locus accessible comprising the step of implanting the step of implanti

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       The specification describes an improved method for obtaining a peptide from bacterial cells after fusion protein expression in the cells. The method comprises treating the bacterial cells with acid to disrupt or lyse the cells and release the peptide from fusion protein, in a single step. The fusion protein comprises the peptide, and a carrier protein, step. The fusion protein comprises the peptide, and a carrier protein, step. The fusion protein comprises the peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cartilage bone formation and endochondral bone formation in a non-union fracture in a mammal. The antibody capable of binding specifically to the osteogenic protein is useful for selectively extracting osteogenic protein from a mixture of molecules. The present sequence represents the amino acid sequence of the human osteogenic protein, OPIA.
                                                                                                                                     Improved treating
                                                                                                                                                                              WPI; 2000-602118/57
N-PSDB; AAA75798.
                                                                                            Example 1; Page 41-42; 53pp; English
                                                                                                                                                                                                                                                                            18-MAR-1999;
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an acid-cleavable site between them.
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                                                                                                                     d production of recombinant peptides from bacterial cells involves g bacterial cells with acid to disrupt or lyse the cells and the peptide from fusion protein.
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of Erwinia carotovora"
23. .161
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162. .1
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167. .1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            endotoxin binding agent; neutralizing agent ic protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of human osteogenic protein and BPI peptide
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Pred. No. 7.4e-07;
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RESULT 75
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Matches 20
A new recombinant DNA vector construct has been developed which encodes a fusion protein and is suitable for introduction into a bacterial host. The vector comprises: (a) DNA encoding at least one cationic bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site located between (a) and (b). The present sequence represents the protein from pING3355 vector construct coding for a BPI fusion protein. The peptides have many uses including the treatment of bacterial and fungal infections. BPI peptides also bind to endotoxins and heparin, neutralising their effects. The peptides have further been shown to inhibit angiogenesis (partly due to heparin-binding activity). The fusion proteins have been found to be expressed in large amounts without significant proteolysis, and in some cases are actually secreted from the host cells. This allows the indirect production of anti-microbial BPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       obtaining recombinant peptides such as bactericidal permeability-increasing protein (BPI)-derived peptides from bacterial cells. BPI-derived peptides from the activity of BPI are useful as antimicrobial agents, as endotoxin binding and neutralizing agents. The present sequence represents fusion protein, comprising subunit D of a human osteogenic protein and a human BPI derived peptide. The construct is used to produce vectors for use in the method of the invention
                                                                                                                                                                                                                                                                                               Recombinant production of bactericidal/permeability increasing protein -
by expression as a fusion protein in microbial host cells, then cleaving
the BPI peptide from the carrier.
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DB; AAT86335.
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Query Match Best Local : Matches

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RESULT 76

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CC A new recombinant DNA vector construct has been developed which encodes a CC fusion protein and is suitable for introduction into a bacterial host. CC The vector comprises: (a) DNA encoding at least one cationic CC bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a CC carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site CC located between (a) and (b). The present sequence represents the protein from pING3356 vector construct coding for a BPI fusion protein. The peptides have many uses including the treatment of bacterial and fungal CC infections. BPI peptides also bind to endotoxins and heparin, CC encutralising their effects. The peptides have further been shown to CC inhibit angiogenesis (partly due to heparin-binding activity). The fusion CC proteins have been found to be expressed in large amounts without CC host cells. This allows the indirect production of anti-microbial BPI CC peptides in microbial hosts. N.B. The present sequence is not shown in CC the specification but is derived from SEQ ID NO:257 on pages 158-159, as CC designated on page 23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Recombinant production of bactericidal/permeability increasing protein -
by expression as a fusion protein in microbial host cells, then cleaving
the BPI peptide from the carrier.
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N-PSDB; AAT86335.
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Pred. No. 7.8e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   endotoxin;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 179;
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                                                                                      RESULT 77
ARABOTA 79
ANA 23299
ID 20292
AC AAW2
AC AAW2
AC AAW2
AC Bact
KW Bact
KW Bact
KW Fung
OS Synt
OS Homo
OS Chim
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Best Local S
Matches 20
Query Match
Best Local Similarity
                                                                                         Sequence
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Chimeric Homo

AAW29298

AAW29298

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AAC

AAW2

AAW

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CC A new recombinant DNA vector construct has been developed which encodes a fusion protein and is suitable for introduction into a bacterial host. CC The vector comprises: (a) DNA encoding at least one cationic bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site CC located between (a) and (b). The present sequence represents the protein CC peptides have many uses including for a BPI fusion protein. The CC peptides have many uses including the treatment of bacterial and fungal C1 infections. BPI peptides also bind to endotoxins and heparin, constructions and to endotoxins and heparin, and the proteins their effects. The peptides have further been shown to construct the proteins have been found to be expressed in large amounts without C2 significant proteolysis, and in some cases are actually secreted from the host cells. This allows the indirect production of anti-microbial BPI ceptides in microbial hosts. N.B. The present sequence is not shown in the specification but is derived from SEQ ID NO.257 on pages 158-159, as C designated on pages 158-159, as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Recombinant production of bactericidal/permeability increasing protein - by expression as a fusion protein in microbial host cells, then cleaving the BPI peptide from the carrier.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1997-480215/44.
N-PSDB; AAT86335.
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on page
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23
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Pred. No. 7.8e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           peptide fusion protein Phe153 (BPI).
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Score 111; DB 2; Pred. No. 7.8e-07;

Length 179

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RESULT 78
AAW29301
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Best Local
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                                                                                                                                                               A new recombinant DNA vector construct has been developed which encodes a fusion protein and is suitable for introduction into a bacterial host. The vector comprises: (a) DNA encoding at least one cationic bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site located between (a) and (b). The present sequence represents the protein product from pING3796 vector construct coding for a BPI fusion protein. The peptides have many uses including the treatment of bacterial and fungal infections. BPI peptides also bind to endotxins and heparin, neutralising their effects. The peptides have further been shown to inhibit angiogenesis (partly due to heparin-binding activity). The fusion proteins have been found to be expressed in large amounts without significant proteclysis, and in some cases are actually secreted from the host cells. This allows the indirect production of anti-microbial BPI mentices in microbial BPI in the cases are actually secreted from the mentices in microbial bPI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Recombinant production of bactericidal/permeability increasing protein -
by expression as a fusion protein in microbial host cells, then cleaving
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1997-480215/44.
N-PSDB; AAT86337.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bactericidal/permeability increasing peptide; BPI; fusion protein; bacterial infection; fungal infection; endotoxin; heparin; angiogenesis; fungicidal; recombinant DNA; vector.
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                                                                                                                         Sequence 179 AA;
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                                                                              Similarity
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                            INPETVPKPCCAPTQLNAIS 20
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                                                               Conservative
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                                                                          100.0%;
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                                                                            Score 111; DB 2;
Pred. No. 7.8e-07;
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                                                                                         Length 179;
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RESULT 79
AAW29296
ID AAW29
AC AAW29
AC AAW29
XX 20-AE
XX 20-AE
XX Bacte
XX Bacte
XX Bacte
XX Bacte
XX Bacte
XX Fungi
XX Fungi
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OS Pecto
OS Homo
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                                                                                                                                                                                             C. A new recombinant DNA vector construct has been developed which encodes a CC fusion protein and is suitable for introduction into a bacterial host. CC The vector comprises: (a) DNA encoding at least one cationic bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site CC carrier protein, and (b). The present sequence represents the protein CC peptides have many uses including for a BPI fusion protein. The CC infections. BPI peptides also bind to endotoxins and heparin, and CC infections. BPI peptides also bind to endotoxins and heparin, and CC infections. BPI peptides also bind to endotoxins and heparin, and constructions their effects. The peptides have further been shown to constitute the proteins have been found to be expressed in large amounts without CC significant proteolysis, and in some cases are actually secreted from the CC peptides in microbial hosts. N.B. The present sequence is not shown in the specification but is derived from SEQ ID NO:257 on pages 158-159, as a design for the present sequence is not shown in the specification but is derived from SEQ ID NO:257 on pages 158-159, as
                                                                     Query Match
Best Local S
Matches 20
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                                                                                                                                               Sequence 179 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pING3354 vector construct BPI peptide fusion protein Ala153(BPI).
                                                                                                                                                                               designated on page 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; Page; 186pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1997-480215/44.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pectobacterium
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAW29296 standard; protein; 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (XOMA) XOMA
116
                                                                       ch 100.0%;
l Similarity 100.0%;
20; Conservative (
                                 INPETYPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96US-00621803
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                                                                         0
                                                                                         Score 111; DB 2;
Pred. No. 7.8e-07;
   135
                                                                         Mismatches
                                                                                                             DB 2;
                                                                                                         Length 179;
                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             angiogenesis;
                                                                           0
                                                                           Gaps
                                                                           0
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RESULT 80 AAB18761 ID AAB18

AAB18761 standard; protein; 190 AA

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                                                         Query Match
Best Local S
Matches 20
                                                                                                                                            The specification describes an improved method for obtaining a peptide from bacterial cells after fusion protein expression in the cells. The method comprises treating the bacterial cells with acid to disrupt or lyse the cells and release the peptide from fusion protein, in a single step. The fusion protein comprises the peptide, and a carrier protein, with an acid-cleavable site between them. The method is useful for obtaining recombinant peptides such as bactericidal permeability-increasing protein (BPI)-derived peptides from bacterial cells. BPI-derived peptides having the activity of BPI are useful as antimicrobial agents, as endotoxin binding and neutralizing agents. The present sequence represents fusion protein, comprising subunit D of a human sequence represents fusion protein, comprising subunit D of a human osteogenic protein and a human BPI derived peptide. The construct is used to produce vectors for use in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                         Improved production of recombinant peptides from bacterial cells involves treating bacterial cells with acid to disrupt or lyse the cells and release the peptide from fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fusion protein expression; bactericidal permeability-increasing protein; BPI; antimicrobial; endotoxin binding agent; neutralizing agent;
                                                                                                                    Sequence 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-602118/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-MAR-2000; 2000WO-US007148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                subunit D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fusion of subunit D of human osteogenic protein and BPI peptide
                                                                                                                                                                                                                                                                                                                                                              Example 1; Page 45; 53pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200055322-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pectobacterium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (XOMA ) XOMA TECHNOLOGY LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAB18761;
 116
                                                        l Similarity
20; Conserv
                        1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ğ
INPETVPKPCCAPTQLNAIS 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               osteogenic protein.
                                                        100.0%; ilarity 100.0%; Conservative 0;
                                                                                                                    Ā,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-00271970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   carotovorum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "pelB leader sequence from the pectate lyase of Erwinia carotovora" 23. .161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               e= "subunit D of human osteogenic protein"
.166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "spacer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "human BPI derived peptide
                                                         Score 111; DB 3;
Pred. No. 8.3e-07;
; Mismatches 0;
                                                                                      Length 190;
                                                           Indels
                                                           0
                                                           Gaps
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RESULT 81

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20-APR-1998 AAW29302;

(first entry)

AAW29302 standard; protein; 195

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RESULT 82
AAW29302
ID AAW29
XX
AC AAW29
XX
AC AAW29
XX
DT 20-AF
                                                                                                                                                                                                                                                                                                  A new recombinant DNA vector construct has been developed which encodes a CC fusion protein and is suitable for introduction into a bacterial host. The vector comprises: (a) DNA encoding at least one cationic bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a coarrier protein, and (c) DNA encoding an amino acid (a) cleavage site CC located between (a) and (b). The present sequence represents the protein product from pIN93353 vector construct coding for a BPI fusion protein. The peptides have many uses including the treatment of bacterial and Cf fungal infections. BPI peptides also bind to endotoxins and heparin, CC neutralising their effects. The peptides have further been shown to cinhibit angiogenesis (partly due to heparin-binding activity). The fusion proteins have been found to be expressed in large amounts without constructions that the proteolysis, and in some cases are actually secreted from the cost cells. This allows the indirect production of anti-microbial BPI compiled to the partides in microbial hosts
                                                                                                                                                                                                         Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Recombinant production of bactericidal/permeability by expression as a fusion protein in microbial host the BPI peptide from the carrier.
                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bactericidal/permeability increasing peptide; BPI; fusion protein; bacterial infection; fungal infection; endotoxin; heparin; angioge fungicidal; recombinant DNA; vector.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAW29304 standard; protein; 194 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Page 155-156; 186pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Better MD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BPI peptide fusion protein pING3353 vector construct protein product
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9735009-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AMOX ( AMOX)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-SEP-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ectobacterium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1997-480215/44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                             116 INPETVPKPCCAPTQLNAIS 135
                                                                                                                                                                          \vdash
                                                                                                                                                                                                           l Similarity
20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAT86342
                                                                                                                                                                                                                                                                          194
                                                                                                                                                                         INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                         100.0%; Score 111; DB 2; ilarity 100.0%; Pred. No. 8.5e-07; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                          AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96US-00621803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97WO-US005287.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            carotovorum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
                                                                                                                                                                          20
                                                                                                                                                                                                                                        Length 194;
                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                increasing protein - cells, then cleaving
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       angiogenesis;
                                                                                                                                                                                                            0
                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                               A new recombinant DNA vector construct has been developed which encodes a fusion protein and is suitable for introduction into a bacterial host. The vector comprises: (a) DNA encoding at least one cationic bactericidal/permeability increasing peptide (BPI), (b) DNA encoding a carrier protein, and (c) DNA encoding an amino acid (aa) cleavage site located between (a) and (b). The present sequence represents the protein product from pIN03359 vector construct coding for a BPI fusion protein. The peptides have many uses including the treatment of bacterial and fungal infections. BPI peptides also bind to endotoxins and heparin, neutralising their effects. The peptides have further been shown to inhibit anglogenesis (partly due to heparin-binding activity). The fusion proteins have been found to be expressed in large amounts without significant proteolysis, and in some cases are actually secreted from the cost cells. This allows the indirect production of anti- microbial BPI consticution in the constitution of anti- microbial BPI constitution.
                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 20
                                                           25-MAR-2003
01-JUL-2002
09-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bactericidal/permeability increasing peptide; BPI; fusion protein; bacterial infection; fungal infection; endotoxin; heparin; angloge fungicidal; recombinant DNA; vector.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pectobacterium carotovorum.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Recombinant production of bactericidal/permeability increasing protein -by expression as a fusion protein in microbial host cells, then cleaving the BPI peptide from the carrier.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N-PSDB; AAT86340.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-SEP-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BPI peptide
 Osteogenic protein 1A; OP1B; osteoarthritis; osteogensis;
                             Osteogenic
                                                                                                                                                                                                                                                                                                                                                        Sequence 195 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1997-480215/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9735009-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chimeric
                                                                                                                                                      AAR51656 standard; protein; 317 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 165-167; 186pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (XOMA ) XOMA CORP.
                                                                                                                                                                                                                                   116
                                                                                                                                                                                                                                                               Н
                                                                                                                                                                                                                                                                                              20;
                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                       in microbial hosts
                             fusion protein 1B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        fusion protein pING3359 vector construct protein product
                                                                                                                                                                                                                                                                                              Conservative
                                                           (revised)
(revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           96US-00621803
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                                                                                                                                                                                                                                                                                                            100.0%;
                                                                                                                                                                                                                                                                                              0
                                OP1B
                                                                                                                                                                                                                                                                                                          Score 111; DB 2;
Pred. No. 8.5e-07;
                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                            Length 195;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            heparin; angiogenesis;
                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       The fusion
                                                                                                                                                                                                                                                                                                Gaps
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AAR85766 ID AAR8 XX

AAR85766 standard; protein;

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RESULT 84
                                                                                                Query Match
Best Local S
Matches 20
                                                                                                                                                                                 includes a MLE leader sequence suitable for promoting expression in E. coli. Fragments of the osteogenic unglycosylated polypeptides produced can be disulphide bonded to form dimers, which form an essential component of an osteogenic protein. This protein is dispersed in a biodegradable matrix which can be implanted into a mammalian bone marrow cavity, here it can induce local cartilage, bone and endochondrial bone formation; and it can also accelerate allograft repair. This implant has the advantage of inducing all stages of bone formation and of having a higher specific activity than other known biosynthetic matterials. The implant can be used to repair non-union fractures and cartilage; treat osteoarthritis; and aid in periodontal, dend or cranicfacial reconstruction. (Updated on 01-UUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cartilage and endochondrial bone formation; allograft repair; periodontal, dental and craniofacial reconstruction; non-union fracture repair.
                                                                                                                                                         Sequence 317 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Implantable device for inducing osteogenesis - comprises porous matrix contg. non-glycosylated dimeric, dissulphide linked osteogenic protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                         AAQ72712 encodes AAR51656 the osteogenic fusion protein 1B
                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Col 99-102; 128pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-DEC-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-OCT-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (STYC ) STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1994-324521/40.
                                           272
                                                                       1 INPETVPKPCCAPTOLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAQ72712
                                                                                                                 Similarity
                                             INPETVEKECCAPTOLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kuberasampath
                                                                                                   Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90US-00569920.
90US-00579865.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   90US-00621988
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           89US-00315342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -00483913
                                                                                                   100.0%; Score 111; DB 2;
100.0%; Pred. No. 1.4e-06;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ή,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ozkaynak E,
                                                                       20
                                             291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oppermann
                                                                                                                               Length 317;
                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                            (OP1B) which
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                                                                                                       Gaps
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4771.

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18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
04-DEC-1990;
04-DEC-1990;
22-FEB-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-FEB-1990;
20-AUG-1990;
07-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-APR-1988;
15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
The sequences given in AAR85765-70 represent fusion proteins comprising fragments of human osteogenic proteins. The MLB leader sequence is suitable for promoting expression in E. coli. The genes were expressed in E. coli under the control of a synthetic Trp promoter-operator to produce synthetic inclusion bodies. Constructs containing the Asp-Pro site were cleaved with acid. The resulting products were purified, refolded and allowed to dimerise. The proteins had osteogenic activity when properly folded and dimerised. Antisera were produced against the purified protecins. The resulting antibodies had binding specificities for osteogenic proteins. The antibodies had binding specification osteogenic proteins. The antibodies had binding specification protocols. Osteogenic proteins, such as these, may be used in an implantable osteogenic device which allows predictable bone formation to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; osteogenic protein; hOP-1; murine; mOP-1; TGF-beta superfamily; transforming growth factor-beta; dimer; antibody; epitope; hippocampus; purification; implantable osteogenic device; bone formation; cranofacia anomaly; skeletal; dental; endochrondral bone formation; MLE leader;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OP1B
                                                                                                                                                                                                                                                                                                            Antibodies with osteogenic protein binding specificity - used i purification of osteogenic proteins, and as antigenic proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
                                                                                                                                                                                                                                                                            Disclosure; Col
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-NOV-1993;
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20-JUN-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Peptide
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                                                                                                                                                                                                                                                                                                                                                                       1996-010159/01.
DB; AAT02606.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRYKER
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                                                                                                                                                                                                                                                                                                                                                                                                                               Kuberasampath
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(first entry)
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90US-00483913
90US-0059920
90US-00579865
90US-00599543
90US-00600024
90US-00621849
90US-00621849
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88US-00232630.
89US-00315342.
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92US-00827052
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                                                                                                                                                                                                                                                                        101-104; 129pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "Probably included due to a cloning anomaly"
62. .317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Residues 176-431 of hOP-1, represents pro-hOP-1"
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                                                                                                                                                                                                                                                                                                                                                                                                                               Ozkaynak
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        RESULT 85
AAM44306
ID AAM44
XX AAM44
XX
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                                                            Extraction of osteogenic protein from mixture - u for novel polypeptide chains useful as subunit(s) protein(s).
                          Disclosure; Col
                                                                                                                                         N-PSDB;
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                                                                                                                                         1998-158353/14.
DB; AAV15209.
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Query Match
Best Local S
Matches 20
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18-OCT-1990;
21-NOV-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    correct acquired and congenital cranofacial and other skeletal or dental anomalies. They may be used to induce local endochrondral bone formation in non-union fractures and in other clinical applications including dental and periodontal applications where bone formation is required. Other potential applications include cartilage repair, e.g. in the treatment of osteoarthritis. (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PF
                                                                                                                           04-DEC-1990;
04-DEC-1990;
                                                                                                                                                                                                                      20-AUG-1990;
07-SEP-1990;
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15-AUG-1988;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          dimeric; recombinant protein:
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17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                                         23-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; osteogenic fusion protein; subunit; endochondral bone formation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human osteogenic fusion protein OP1B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-MAY-1998
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                                                                                                             22-FEB-1991;
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20; Conserv
STRYKER CORP
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ilarity 100.0%;
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90US-00621988.
91US-00660162.
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90US-00600024.
90US-00616374.
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Pred. No. 1.4e-06;
; Mismatches 0;
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101-102;

127pp; English

using antibodies specific s) of dimeric osteogenic

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Oppermann

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RESULT 86
AAW89683
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AC AAW89
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                                                                                                                                                                                                                                                                                                                              18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
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24-MAR-1999
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07-SEP-1990;
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                                                                                   (STYC)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                marrow differentiation.
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                                                                                   STRYKER
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(first entry)
                                                                                                                                                               90US-00600024
90US-00616374
90US-00621849
90US-00621988
91US-0066162
91US-0060162
91US-00817052
92US-00841646
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89US-00422699
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89US-00315342.
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-00579865.
-00599543.
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Pred. No. 1.4e-06;
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Kuberasampath

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Oppermann

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Ozkaynak E;

22-FEB-1990; 20-AUG-1990; 07-SEP-1990;

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RESULT 87
AAY43117
ID AAY43
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Best Local S
Matches 20
                                                  08-APR-1988;
15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                                                          Chondrogenic protein; biodegradable matrix; cell proliferation; cell differentiation; migratory progenitor cell; cartilage formation; allogenic implant; xenogenic implant; endochondral bone formation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic acid encoding mammalian osteogenic proteins in prepro form - ab to induce cartilage and bone formation when implanted in matrix, useful for repairing bone defects.
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N-PSDB; AAX00234.
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                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                              osteogenic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY43117 standard; protein; 317
                                                                                                                                                                 24-MAY-1995;
                                                                                                                                                                                                      28-SEP-1999
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88US-00179406

88US-0023263

89US-00315342

89US-00422613

89US-0042269

90US-00569920

90US-00579865
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Pred. No. 1.4e-06;
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21-NOV-1990
04-DEC-1990
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20-DEC-1991
21-FEB-1991
22-DEC-1992
22-DEC-1992
08-APR-1988;
15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This sequence is an osteogenic protein 1B (OP1B) fusion protein. The invention relates to a device for implantation in a mammal comprising a chondrogenic protein (I) dispersed within a biocompatible, in vivo degradable matrix defining pores which permits the influx, proliferation and differentiation of migratory progenitor cells, where (I) comprises a substantially pure protein with the amino acid sequence VPKPCCAPT, which is capable of inducing cartilage formation. The device is used as an allogenic or xenogenic implant for the induction endochondral bone formation in mammals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Implant for mammals permitting the influx, proliferation \epsilon differentiation of migratory progenitor cells, useful for endochondral bone formation in mammals.
                                                                                                                                                                                                                                                               human; osteogenic protein 1B; OP1B; osteogenic device; endochondral bone formation; bone repair; cartilage repair; vascularisation; mineralisation; bone marrow differentiation
                                                                                                                                                                                                                                                                                                                                                                               06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADJ62686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 317 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure;
                                                                                                               04-SEP-1998;
                                                                                                                                                                                     US6551995-B1
                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                       Human osteogenic protein 1B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (STYC)
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DB; AAZ27585.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INPETVPKPCCAPTQLNAIS 291
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88US-00179406.

88US-00232630.

89US-00315342.

89US-00422613.

89US-00422623.
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91US-00660162.
91US-00810560.
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90US-00600024.
90US-00616374.
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92US-00841646.
92US-00995345.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein;
                                                                                                                                                                                                                                                                                                                                                                             entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 111; DB 2;
Pred. No. 1.4e-06;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ozkaynak E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 317;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oppermann
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or inducing
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Best Local S
Matches 20
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22-FEB-1990;
20-AUG-1990;
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04-DEC-1990;
04-DEC-1990;
04-DEC-1990;
22-FEB-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an osteogenic device for implantation in a mammal, comprising a ceramic or biodegradable non-collagen polymer matrix defining pores of a dimension sufficient to permit influx, differentiation and proliferation of migratory progenitor cells from the body of mammal, and a substantially pure osteogenic protein competent to induce endochondral bone formation when disposed in the matrix and implanted in mammals. The device is useful for producing endochondral bone formation in mammals, for bone and cartilage repair, for inducing the full developmental cascade of endochondral bone formation in cludding vascularisation, mineralisation and bone marrow differentiation at the locus of an implant when implanted in a mammallan body. The device is useful for bone formation in various orthopedic, periodontal and reconstructive procedures. The present sequence represents the amino acid sequence of human osteogenic protein 1B, OP1B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Osteogenic device useful for inducing endochondral bone formation in mammals, comprises ceramic or biodegradable non-collagen polymer matrix containing substantially pure natural-sourced mammalian osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI;
 Homo sapiens.
Escherichia coli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                           cartilage
                                                                                             Human; osteogenic protein; OP1; CBMP2A; endochondral bone formation; cartilage
                                                                                                                                                   Human osteogenic
                                                                                                                                                                                         29-JAN-2004
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24-MAY-1995;
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28-JAN-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
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                                                                                                                                                                                                                                                                 standard;
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                                                                           repair;
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92US-00827052.
92US-00841646.
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90US-00621849.
90US-00621988.
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90US-00483913.
90US-00569920.
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                                                                                                                                                   protein,
                                                                             dental reconstructive
                                                                                                                                                                                                                                                                 protein;
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                                                                                                                                                   OPIB
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 111; DB 7;
Pred. No. 1.4e-06;
; Mismatches 0;
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                                                                                                                                                   fusion.
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                                                                                         formation;
                                                                           procedure
                                                                                             CBMP2B; osteogenic device; ormation; non-union fractu
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Gaps

US2003069401-A1

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CC mammal, comparising osteogenic protein (OP) dispersed within a comparising osteogenic protein (OP) dispersed within a conformation in vivo biodegradable matrix, where OP comprises a pair (C) of unglycosylated protein chains disulphide bonded to produce dimeric Species having a conformation so that (P) is capable of inducing and capable of inducing endochondral bone formation in mammal when disposed in the matrix and capable of inducing endochondral bone formation in second in the matrix and osteogenic protein (comprising a pair of unglycosylated protein comprising a pair of unglycosylated protein comprising a pair of unglycosylated protein comprising a pair of unglycosylated protein comprises peptides derived from human or mouse OPI), a DNA sequence comprises peptides derived from human or mouse OPI), a DNA sequence commammal, a vector comprising the DNA, a host cell harbouring and capable of expressing (DNA or vector), an osteogenic protein as defined above cof expressing (DNA or vector), an osteogenic protein as defined above cof binding specifically to an epitope on the osteogenic proteins. The condochondral bone formation in a mammal, for inducing cartilage or endochondral bone formation in a mammal, for inducing cartilage or endochondral bone formation in a mammal, or for inducing cartilage or endochondral bone formation in a mammal, or for inducing endochontal or dental reconstructive procedures, or in endochondral bone cartilage repair in a mammal. The costeogenic proteins are useful for cartilage repair in a mammal. The osteogenic proteins are useful to raise monoclonal are polyclonal costeogenic proteins are useful to raise monoclonal are polyclonal costeogenic proteins are useful to raise monoclonal are polyclonal cantibodies capable of specifically binding to an epitope of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Osteogenic device for inducing endochondral bone formation, has osteogenic protein comprising a pair of unglycosylated protein disulfide bonded to produce dimeric species, dispersed within biocompatible matrix.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to an osteogenic device for implantation in mammal, comprising osteogenic protein (OP) dispersed within a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (OPPE/)
(OZKA/)
(KUBE/)
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PANG R H
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KUBERASAMPATH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPPERMANN H.
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91US-0060162.
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95US-00147023.
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89US-00422699.
90US-00483913.
90US-00569920.
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90US-00616374.
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RESULT 90
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ID ADM80
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XX human
XX Homo
XX D1-N(
PR 21-FI
PR 04-NI
PR 21-FI
PR 04-NI
PR 15-AI
PR 21-FI
PR 04-NI
PR 10-N(
PR 21-FI
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PR 2
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-AUG-1988;
28-JAN-1992;
21-FEB-1992;
01-NOV-1993;
24-MAY-1995;
The invention relates to an osteogenic device for implantation in mammal, comprising osteogenic protein dispersed within blocompatible matrix defining pores, differentiation, and proliferation of migratory progenitor cells from body of mammal, improvement where osteogenic protein comprises pair of unglycosylated protein chains disulfide bonded to produce dimeric species capable of inducing endochondral bone formation. The device is useful for inducing endochondral bone formation in a non-union fracture in a mammal, for use in periodontal or dental reconstructive procedures, for use in cartilage repair in a mammal, for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               osteogenic protein. The present sequence represents a human osteogenic protein as a fusion protein with an E. coli leader sequence for heterologous expression. Note: The claims refer to regions of mouse and human osteogenic proteins which are functional in the osteogenic device, however the authors refer to a DNA SEQ ID number where they really mean to refer to a protein.
                                                                                                                                                                                                                                                                                                                                                                Osteogenic device for implantation in mammal comprising osteogenic protein dispersed within biocompatible matrix, osteogenic protein comprising pair of unglycosylated protein chains, inducing endochondral bone formation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cartilage repair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human; osteogenic device; osteogenic protein; OP1B; biocompatible matrix; endochondral bone formation; non-union fracture; cartilage formation; periodontal reconstructive procedure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human osteogenic protein,
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                                                                                                                                                                                                                                                                                                        Disclosure; SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Opperman H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-DEC-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (STYC )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2004-167144/16.
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88US-00232630.
92US-00827052.
92US-00841646.
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95US-00449699.
98US-00148925.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
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Pred. No. 1.4e-06;
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272

INPETVPKPCCAPTQLNAIS 291 INPETVPKPCCAPTQLNAIS 20

ADO05621 standard;

protein;

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Query Match Best Local S Matches 20

Similarity

20;

Sequence 317 AA;

1

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use in endochondral bone reconstructive procedures. The device is useful for inducing carrilage or endochondral bond formation in a mammal comprising the step of implanting the mammal at a locus accessible to migratory progenitor cells. The device is useful for inducing local cartilage bone formation and endochondral bone formation in a non-union fracture in a mammal. The antibody capable of binding specifically to the osteogenic protein is useful for selectively extracting osteogenic protein from a mixture of molecules. The present sequence represents the amino acid sequence of the human osteogenic protein, OPIB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EXMES; extracellular messenger; transgenic; human; anti-HIV; anabolic; hypertensive, antiallergic; antianemic; antiasthmatic; antiarteriosclerotic; antiinflammatory; dermatological; immunosuppressive; antidiabetic; nephrotropic; antithyroid; muscular; neuroprotective; ophthalmological; uropathic; cytostatic; endocrine; antirheumatic; antiarthritic; antiulcer; gastrointestinal; hepatotropic; antipsoriatic; vasotropic; anticoagulant; thrombolytic; vaccine; gene therapy.
The invention relates to human extracellular messenger (EXMES) polypeptide and encoding polynucleotides. The EXMES polypeptides can be expressed by standard recombinant methodology. Compositions comprising EXMES specific antibodies are useful for treating a disease or condition associated with decreased expression of functional extracellular messengers. The polypeptide and its encoding polynucleotide is useful for diagnosing, preventing and treating autoimmune/inflammatory disorders such as AIDS, Addison's disease, allergies, anaemia, asthma,
                                                                                                                                                                                                                                      New isolated polypeptide, useful for diagnosing, preventing, or treating autoimmune/inflammatory disorders (e.g., AIDS), cell proliferative disorders (e.g., bursitis) and endocrine disorders (e.g., dwarfism).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 111; DB 8; ilarity 100.0%; Pred. No. 1.4e-06; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                             Lindquist EA, Khare R, Chawla NK; UK, Richardson TW, Marquis JP, S
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AAR44752
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  cc atherosclerosis, Crohn's disease, atopic dermatitis, diabetes mellitus, cglomerulonephritis, Grave's disease, mysathenia gravis, Reiter's cyndrome, Werner syndrome, rheumatoid arthritis, Sjogren's syndrome, CC multiple sclerosis, ulcerative colitis, a cell proliferative disorder such as actinic keratosis, arteriosclerosis, burstis, cirrhosis, chepatitis, myelofibrosis, psoriasis, cancers, and endocrine disorders such as aneurysm, vascular malformation, thrombosis, Sheehan syndrome, CC such as aneurysm, vascular malformation, thrombosis, Sheehan syndrome, contine polymucleotide primers derived from the polymucleotide primers derived from the polymucleotide primers derived from contine processes, and dwarfism. The oligonucleotide primers derived from the polymucleotide primers derived from the polympitide may is useful in transcript considered from the polympitide may be useful of large nymber of genes simultaneously. The polympitide may be useful of large compounds of a variety of drug screening techniques. The present sequence represents a human EXMES collympitide and for screening libraries of compounds in any of a variety of drug screening techniques. The present sequence represents a human EXMES
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Best Local S
Matches 20
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01-JUL-2002
06-JUN-1994
                                                             17-OCT-1989
22-FEB-1990
20-AUG-1990
07-SEP-1990
18-OCT-1990
21-NOV-1990
04-DEC-1990
04-DEC-1990
                                                                                                                                                                                                                                                                15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo
                                                                                                                                                                                                                                                                                                                                    08-APR-1988;
                                                                                                                                                                                                                                                                                                                                                                               21-FEB-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein; bone; cartilage; matrix; osteoarthritis;
ation; mineralisation; differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               fusion
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(revised)
(first entry)
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90US-00579865.
90US-00599543.
90US-0060024.
90US-0061674.
90US-00621849.
90US-00621988.
91US-00660162.
91US-00810560.
                                                                                                                                                                                                89US-00422699.
90US-00483913.
90US-00569920.
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89US-00422613.
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88US-00232630
                                                                                                                                                                                                                                                                                                                                                                                 92US-00841646.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /label= Leader sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein OPID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .408
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Pro form of OP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 111; DB 8;
Pred. No. 1.6e-06;
); Mismatches 0;
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ARESULT 91
AD005621
ID AD005
AC AD005
XX AD005
XX 15-JU
XX 15-JU
XX EXMES
KW EXMES
KW ANTLL
KW INMUN
KW INMUN
KW INMUN
KW ANTLL
K

03-OCT-2003; 2003WO-US031535.

Homo sapiens

WO2004033637-A2

Human EXMES polypeptide (ID 7521939CD1).

(first entry)

04-OCT-2002; 2002US-0416004P. 08-NOV-2002; 2002US-0424862P.

INCYTE CORP.

Elliott VS, Ramkumar J,

Emerling Lee SY,

BM, Tran

WPI; 2004-340907/31. N-PSDB; ADO05636.

Claim 1; SEQ ID NO 12; 137pp; English

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Best Local S
Matches 20
 08-APR-1988;
15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
22-FEB-1990;
07-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                             25-MAR-2003
01-JUL-2002
09-JUN-1995
                                                                                                                                                                                                                                                                                    Osteogenic protein 1D; OP1D; osteoarthritis; osteogensis; cartilage and endochondrial bone formation; allograft repair; periodontal, dental and craniofacial reconstruction; non-union fracture repair.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The fusion protein encodes the entire pro form of OP1 (residues 39-431 of ARA44746) linked via an Asp-Pro cleavage site to a leader sequence (residues 1-13) suitable for promoting expression in E. coli. The protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-UUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                   18-DEC-1992;
                                                                                                                                                                                                                                                                                                                                                   Osteogenic fusion protein 1D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New pure mammalian osteogenic proteins - induce cartilage and endochondral bone formation when in association with a matrix.
                                                                                                                                            11-OCT-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR51658;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR51658 standard; protein; 408
                                                                                                                                                                    US5354557-A
                                                                                                                                                                                                                      Peptide
                                                                                                                                                                                                                                                            Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         363 INPETVPKPCCAPTQLNAIS 382
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ch 100.0%; Score 111; DB 2; Similarity 100.0%; Pred. No. 1.7e-06; 20; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Col 111-116; 128pp; English.
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(revised)
(first entry)
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88US-00232630

89US-00315342

89US-00422613

89US-00422693

90US-00483913

90US-00569920

90US-00579865
                                                                                          88US-00179406
                                                                                                                   92US-00993387
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/label= sig_peptide
/note= "leader sequ
                                                                                                                                                                                                                                 Location/Qualifiers
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                                                                                                                                                                                             sequence (short TRP) "
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18-OCT-1990;
11-OCT-1990;
21-NOV-1990;
04-DEC-1990;
04-DEC-1990;
22-FBB-1991;
20-DEC-1991;
28-JAN-1992;
21-FEB-1992;
                                              AAQ72714 encodes AAR51658 the osteogenic fusion protein 1D (OP1D) which includes a "short TRP" leader sequence suitable for promoting expression in E. coli. Fragments of the osteogenic unglycosylated polypeptides produced can be disulphide bonded to form diners, which form an essential component of an osteogenic protein. This protein is dispersed in a biodegradable matrix which can be implanted into a mammalian bone marrow cavity, here it can induce local cartilage, bone and endochondrial bone formation; and it can also accelerate allograft repair. This implant has the advantage of inducing all stages of bone formation and of having a higher specific activity than other known biosynthetic materials. The implant can be used to repair non-union fractures and cartilage; treat osteoarthritis; and aid in periodontal, dental or cranifacial reconstruction. (Updated on 01-UTU-2002 to add missing pA field.) (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1994-324521/40.
N-PSDB; AAQ72714.
Sequence 408 AA;
                                                                                                                                                                                                                                                                                                                                                             Implantable device for inducing osteogenesis - comprises porous matrix contg. non-glycosylated dimeric, di:sulphide linked osteogenic protein
                                                                                                                                                                                                                                                                                                                            Disclosure; Col 111-114; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (STYC ) STRYKER CORP.
                                PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kuberasampath
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90US-00600024.
90US-00616374.
90US-00621849.
90US-00621988.
91US-00660162.
91US-00660162.
91US-00827052.
92US-00841646.
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RESULT 94
AAR85768
ID AAR85
XX
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Best Local S
Matches 20
                                                                                                            Human; osteogenic protein; hOP-1; murine; mOP-1; TGP-beta superfamily; transforming growth factor-beta; dimer; antibody; epitope; hippocampus; purification; implantable osteogenic device; bone formation; cranofacia anomaly; skeletal; dental; endochrondral bone formation; MLE leader;
                                                            Homo sapiens.
Escherichia coli.
                                                                                                                                                                       OPID fusion protein encoded by OPI(d) cDNA.
                                                                                                                                                                                                                                     AAR85768;
                                                                                                                                                                                                                                                           AAR85768 standard; protein; 408 AA
                        Peptide
                                                                                                 non-union fracture;
                                                                                                                                                                                                                                                                                                                         363 INPETVEKECCAPTOLNAIS 382
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20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                (revised)
(first entry)
/note= "Short TRP leader
14. .15
                                    Location/Qualifiers
                                                                                                 cartilage repair; osteoarthritis.
                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
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Pred. No. 1.7e-06;
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                                                                                                                                                                                                                                                                                                                                                                                                Length 408;
                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                           cranofacial;
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Cleavage-site

Protein

/note= "Asp-Pro acid cleavage site"
16. .317

おから とうしょう 一日本の大

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The sequences given in AAR85765-70 represent fusion proteins comprising CC fragments of human osteogenic proteins. The MLE leader sequence is cuitable for promoting expression in E. coli. The genes were expressed in E. coli under the control of a synthetic Trp promoter-operator to produce synthetic inclusion bodies. Constructs containing the Asp-Pro site were cleaved with acid. The resulting products were purified, refolded and collowed to dimerise. The proteins had osteogenic activity when properly CC folded and dimerised. Antisera were produced against the purified proteins. The resulting antibodies had binding specificities for osteogenic proteins. The antibodies are capable of binding specifically CC on epitope of the osteogenic protein and may be used in purification CC protocols. Osteogenic device which allows predictable bone formation CC implantable osteogenic device which allows predictable bone formation CC anomalies. They may be used to induce local endochrondral bone formation CC dental and periodontal applications where bone formation is required. CC other potential applications include cartilage repair, e.g. in the CC field.) (Updated on 25-MAR-2003 to correct PR field.)
                                              Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-SEP-1990
18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
04-DEC-1990;
04-DEC-1990;
04-DEC-1991;
22-FEB-1991;
28-JAN-1992;
21-FEB-1992;
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23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
17-OCT-1989;
22-FEB-1990;
20-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                         Antibodies with purification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (STYC
                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-PSDB;
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                                                                                                Sequence 408 AA;
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363
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                       H
                                              l Similarity
20; Conserv
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                 INPETVPKPCCAPTQLNAIS 20
INPETVEKECCAPTQLNAIS 382
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                                               Conservative
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92US-00827052.
92US-00841646.
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90US-00569920
90US-00579865
90US-00599543
90US-00616374
90US-00616374
90US-00621849
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88US-00232630.
89US-00315342.
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89US-00422699
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osteogenic
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                                                          100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                        protein binding approteins, and as
                                               <u>,</u>
                                                          Score 111; DB 2;
Pred. No. 1.7e-06;
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                                                 Mismatches
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s antigenic pro
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                                                                        Length 408;
                                               Indels
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                                                 Gaps
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                       Pang
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18-OCT-1990;
21-NOV-1990;
04-DEC-1990;
04-DEC-1990;
04-DEC-1991;
22-FEB-1991;
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15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
                                                          28-JAN-1992;
21-FEB-1992;
01-NOV-1993;
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20-AUG-1990;
07-SEP-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; osteogenic fusion protein; subunit; endochondral bone formation; dimeric; recombinant protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human osteogenic fusion protein OP1D.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAW44308;
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                                                                                                                                                                                                                                                                                                                                  23-MAY-1995;
                               (STYC ) STRYKER CORP.
   RHL,
                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                         -1990
    Rueger DC,
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                                                                                    900S-00600024
900S-00616374
900S-00621849
900S-0062188
900S-00660162
910S-0060162
910S-00810560
920S-00827052
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90US-00599543.
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90US-00483913
                                                            93US-00147023
                                                                           92US-00841646
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      Kuberasampath T,
      Oppermann
H,
      Ozkaynak
      ø
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N-PSDB; WPI; 1998-158353/14.

Extraction of osteogenic protein from mixture - using antibodies specific for novel polypeptide chains useful as subunit(s) of dimeric osteogenic protein(s).

Disclosure; Col 111-114; 127pp; English.

The present sequence represents a human osteogenic fusion protein, which is used in the present invention. The present invention describes methods for selectively extracting an osteogenic protein (OP) from a mixture. The method comprises: (a) exposing the mixture to an antibody that specifically binds OP, separating the resulting antibody-protein complex from the mixture, and dissociating the complex. In the methods OP comprises a pair of oxidised subunits that are disulphide-bonded to form a dimer, and one of the subunits has an amino acid (aa) sequence sufficiently homologous to residues 335-431 of a 431 aa protein designated OPS, sequence given in the specification. In dimeric form OP is capable of inducing cartilage and endochondral bone formation in a mammal when disposed within a matrix implanted in the mammal. The methods are used for recovering the recombinant proteins from cell cultures

Sequence 408 AA,

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RESULT

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Query Match
Best Local Similarity
Matches 20; Conserv
 100.0%; Score 111; DB 2; llarity 100.0%; Pred. No. 1.7e-06; Conservative 0; Mismatches 0;
                                Length 408;
    Indels
    0
    Gaps
    0
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AAW89685 standard; protein; 408

AAW89685

20-MAR-2003 24-MAR-1999 (revised) (first en entry)

fusion protein OPID.

Human; osteogenic protein; OP-1; OPX; endochondral bone formation; cartilage; craniofacial defect; skeletal disorder; dental disorder; non-union fracture; osteoarthritis; vascularisation; mineralisation; marrow

Homo sapiens.

Synthetic.

US5863758-A

23-MAY-1995; 95US-00449700

08-APR-1988; 15-AUG-1988; -1989; 1989;

20-AUG-1990; 07-SEP-1990; 18-OCT-1990; 18-OCT-1990; 88US-00232630 89US-004315342 89US-00422613 89US-00422699 90US-00483913 90US-00579865 90US-00579865

21-FEB-1992; 01-NOV-1993; 04-DEC-1990; -1991; 90US-00600024 90US-00616374 90US-00621988 91US-00621988 91US-00660162 91US-00810560 92US-00810560 92US-00810563 93US-00810543

(STYC) STRYKER CORP

RHL, Rueger DC, Kuberasampath T, Oppermann Ή Ozkaynak

WPI; 1999-131303/11. N-PSDB; AAX00236.

Nucleic acid encoding mammalian osteogenic per to induce cartilage and bone formation when for repairing bone defects. proteins in prepro form - able n implanted in matrix, useful

Disclosure; Col 111-114; 127pp; English.

The present invention describes isolated DNA (I) encoding at least one osteogenically active region of human osteogenic protein-1 in prepro form (OPI-PP), murine OPI-PP, murine OPI-PP or human OPI-PP Also described are: (A) DNA related to (I) encoding a polypeptide able to form dimers that can induce cartilage and endochondral bone formation in a mammal when implanted in a matrix; (B) vectors containing (I) or related DNA; (C) host cells transformed with this vector; (D) DNA (I') encoding a prepro- or pro-OPI, and related vectors and transformed cells; (E) osteogenic protein (II) produced by expression of transformed mammalian cells, able to induce bone and cartilage formation; (F) mature OPI that from mammalian cells following expression of the sequence that

Implant for mammals permitting the influx,

proliferation and

1999-589530/50. DB; AAZ27587.

Ö,

Pang RHL,

Kuberasampath

'n

Ozkaynak E,

Oppermann

Ξ

RESULT 97
AAY43119
ID AAY43 밁 Ś 888888888888 Matches Query Match Best Local : 04-DEC-1990; 04-DEC-1990; 22-FEB-1991; 20-AUG-1990; 07-SEP-1990; 18-OCT-1990; encodes hOP1-PP, and (G) production of an active osteogenic composition by truncating mature OP1 protein. Host cells of (C) are used to produce proteins able to induce cartilage and bone formation, e.g. for correction of acquired or congenital craniofacial defects or other skeletal or e.g. in osteoarthritis, or generally wherever bone formation is required. The proteins induce complete development of endochondral bone, including vascularisation, mineralisation and bone marrow differentiation. The present sequence represents an osteogenic fusion protein OP1D. (Updated on 20-MAR-2003 to correct PA field.) Chondrogenic protein; biodegradable matrix; cell proliferation; cell differentiation; migratory progenitor cell; cartilage form allogenic implant; xenogenic implant; endochondral bone formati 18-OCT-1990; 21-NOV-1990; 08-APR-1988; 24-MAY-1995; 28-SEP-1999 Synthetic. allogenic implant; xenogenic osteogenic protein. Osteogenic protein OPID fusion protein sequence Sequence 408 AA; (STYC 28-JAN-1992; 20-DEC-1991; 17-OCT-1989 US5958441-A. 16-DEC-1999 AAY43119 L5-AUG-1988 363 1 INPETVPKPCCAPTQLNAIS 20 l Similarity 20; Conser STRYKER BIOTECH standard; protein; 408 INPETVPKPCCAPTQLNAIS Conservative (first entry) 900S-00621988 910S-00660162 910S-00810560 920S-00827052 920S-00841646 920S-0095345 930S-00147023 88US-00179406 9008-00616374 89US-00422699 88US-00232630 95US-00449699 90US-00579865 100.0%; CORP 0, Score 111; I Pred. No. 1.7 0; Mismatches 382 e 111; DB 2; . No. 1.7e-06; smatches 0; Length 408; Indels formation; 0 0

differentiation of migratory progenitor cells, useful for inducing endochondral bone formation in mammals.

Disclosure; Col 109-112; 127pp; English

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363

ADJ62690

98

Query Match
Best Local S
Matches 20

20;

Sequence 408

) (2)

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This sequence is an osteogenic protein ID (OPID) fusion protein. The invention relates to a device for implantation in a mammal comprising a chondrogenic protein (I) dispersed within a biocompatible, in vivo degradable matrix defining pores which permits the influx, proliferation and differentiation of migratory progenitor cells, where (I) comprises a substantially pure protein with the amino acid sequence VPKPCCAPT, which is capable of inducing cartilage formation. The device is used as an allogenic or xenogenic implant for the induction endochondral bone formation in mammals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human; osteogenic protein 1D; OP1D; osteogenic device; endochondral bone formation; bone repair; cartilage repair; vascularisation; mineralisation; bone marrow differentiation
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                                                                                       STRYKER
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88US-00232630.
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89US-00483913.
90US-00569920.
90US-00569920.
90US-00569920.
90US-00569920.
90US-005163913.
90US-00616374.
90US-00621988.
                                  Ozkaynak
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92US-00827052.
92US-00841646.
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100.0%; Pred. No. 1.7e-06;
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                                Kuberasampath
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Matches 20
08.APR-1988
15.AUG-1988
23.FEB-1988
17.OCT-1989
17.OCT-1989
17.OCT-1989
22.FEB-1990
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18.OCT-1990
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04.DEC-1990
04.DEC-1990
04.DEC-1990
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04.DEC-1990
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Escherichia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; osteogenic endochondral bone
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90US-00509543

90US-00616374

90US-00621849

90US-00621988

91US-00660162
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89US-00315342.
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RESULT 98
ADJ62690
ID ADJ62690
ADJ62690
AC ADJ6
AC ADJ

08-APR-1988; 04-SEP-1998; US6551995-B1 Homo sapiens

15-AUG-1988 23-FEB-1989 17-OCT-1989 17-OCT-1989 17-OCT-1989 27-FEB-1990 20-AUG-1990 20-AUG-1990 20-AUG-1990 18-OCT-1990 18-OCT-1990 18-OCT-1990 04-DEC-1990 04-DEC-1990 04-DEC-1990 22-FEB-1991 20-DEC-1990 22-FEB-1991 28-DAW-1992 21-FEB-1992

Oppermann H,

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XXCCCCCCCCCCCXXXXCCCCCCXXXX
                                           The invention relates to an osteogenic device for implantation in a mammal, comprising a ceramic or biodegradable non-collagen polymer matrix defining pores of a dimension sufficient to permit influx, differentiation and proliferation of migratory progenitor cells from the body of mammal, and a substantially pure osteogenic protein competent to induce endochondral bone formation when disposed in the matrix and implanted in mammals. The device is useful for producing endochondral bone formation in mammals, for bone and cartilage repair, for inducing the full developmental cascade of endochondral bone formation in including vascularisation, mineralisation and bone marrow differentiation at the locus of an implant when implanted in a mammalian bone, The device is useful for bone formation in various orthopedic, periodontal and reconstructive procedures. The present sequence represents the amino acid sequence of human osteogenic protein 1D, OPID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Osteogenic device useful for inducing endochondral bone formation mammals, comprises ceramic or biodegradable non-collagen polymer materialism substantially pure natural-sourced mammalian osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-575998/54.
N-PSDB; ADJ62689.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 15; 127pp; English.
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Similarity
INPETVPKECCAPTQLNAIS
            INPETVPKPCCAPTQLNAIS
                                   100.0%; ilarity 100.0%; Conservative 0
                                   0
                                 Score 111; DB 7; I
Pred. No. 1.7e-06;
382
                 20
                                                   Length 408;
                                    Indels
                                    0
                                    Gaps
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0

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standard; protein; 408
                       (first entry
OPID
fusion
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racture;

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Commandal, comprising osteogenic protein (op) dispersed within a biocompatible, in vivo biodegradable matrix, where Op comprises a pair (P) of unglycosylated protein chains disulphide bonded to produce dimeric cessible to the cells. Also included are substantially a pure mammalian consteogenic protein (comprising a pair of unglycosylated protein chains disulphide bonded to produce dimeric cendochondral bone formation in mammal when disposed in the matrix and cacessible to the cells. Also included are substantially a pure mammalian contents and capable of inducing a pair of unglycosylated polypeptide chains and capable of inducing endochondral bone formation in association with a matrix when implanted in a mammal, where the osteogenic protein comprises peptides derived from human or mouse OPI), a DNA sequence encoding a protein capable of inducing endochondral bone formation in a mammal, where the osteogenic protein cendochondral bone formation in a mammal protein and an antibody (Ab) capable of expressed from recombinant DNA in a host cell, a polypeptide chain useful cas a subunit of a dimeric osteogenic protein and an antibody (Ab) capable of binding specifically to an epitope on the osteogenic protein. The cast tell for inducing local cartilage and bone constructive procedures of cartilage repair in a mammal, for inducing cartilage or endochondral bone formation in a mammal, for inducing cartilage or endochondral bone formation in a mammal, for inducing cartilage or endochondral bone formation in a mammal, for inducing cartilage or endochondral bone formation in a mammal, in decing endochondral of certain reconstructive procedures, or in endochondral bone cartilage repair in a mammal, in the osteogenic protein save useful to raise monoclonal are expression. The costeogenic protein save useful to raise monoclonal are expression. The costeogenic protein with an E. coll leader sequence for heterologous expression. Note The calaims refer to regions of mouse and constant the successions of mouse and constant the p
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                                                                                                                                          Query Match
Best Local
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28-JAN-1992;
21-FEB-1992;
21-FEB-1992;
01-NOV-1993;
23-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Osteogenic device for inducing endochondral bone formation, has osteogenic protein comprising a pair of unglycosylated protein chains disulfide bonded to produce dimeric species, dispersed within
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; SEQ ID NO 15; 130pp; English.
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(OZKA/)
(KUBE/)
(RUEG/)
                                                                                                                                          Sequence
363
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RUEGER D C.
PANG R H L.
                                                                                                                                                                            the authors re
r to a protein.
                                                                                        Similarity
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                          INPETVPKPCCAPTQLNAIS
                                                                      Conservative
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92US-00827052.
92US-00841646.
92US-00995345.
93US-00147023.
95US-00447570.
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                                                                     0;
                                                                                      Score 111;
Pred. No. 1
 382
                                    20
                                                                      Mismatches
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L.7e-06;
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RESULT 100 ADM80499

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INPETVPKPCCAPTQLNAIS

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defining pores, differentiation, and proliferation of migratory protein comprises pair of unglycosylated protein chains disulfide bonded to produce dimeric species capable of inducing endochondral bone formation. The device is useful for inducing endochondral bone formation in a mammal, for inducing cartilage or endochondral bone formation in a mammal, for use in periodontal or dental reconstructive procedures, for use in cartilage or endochondral bone formation in a mammal, for use in periodontal or dental comprising the step of implanting the mammal and a mammal comprising the step of implanting the mammal and accessible to migratory progenitor cells. The device is useful for inducing local cartilage bone formation and endochondral bone formation in a mon-union fracture in a mammal. The antibody capable of binding specifically to the osteogenic protein from a mixture of molecules. The present sequence represents the camino acid sequence of the human osteogenic protein, OP1D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-APR-1988;
15-AUG-1988;
28-JAN-1992;
                                                                                                                                                                                                                                                                                                                                                         comprising osteogenic protein defining pores, different
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-FEB-1992;
01-NOV-1993;
24-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Osteogenic device for implantation in mammal comprising osteogenic protein dispersed within biocompatible matrix, osteogenic protein comprising pair of unglycosylated protein chains, inducing endochondral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              human; osteogenic device; osteogenic protein; OPID; biocompatible matrix; endochondral bone formation; non-union fracture; cartilage formation;
                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 15; 136pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-DEC-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  periodontal reconstructive procedure; dental reconstructive procedure;
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92US-00827052.
92US-00841646.
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98US-00148925
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                   100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                   an osteogenic device for implantation in mammal, otein dispersed within biocompatible matrix
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                   Score 111; DB 8;
Pred. No. 1.7e-06;
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                                    Length 408;
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RESULT 101

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Query Match
Best Local S
Matches 20
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09-JAN-2003
22-JUL-1991
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22-FEB-1990;
20-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OP;
                                                                                       Pragments of osteogenic protein product may be used to impregnate a matrix upon which endochondral bone formation may be reliably induced, including vascularisation, mineralisation and bone marrow differentiation. The technique is especially useful in dental and craniofacial anomalies, and may also be applied to cartilage repair, eg.osteoarthritis. The OP1 product may be expressed from a transformed mammalian host cell, eg.CHO or simian kidney cells. (Updated on 09-UAN-2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct PA
                                                                                                                                                                                                      Osteogenic device for implantation in a mammal - comprising a matrix of treated collagen particles and a protein which induces bone formation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cebus apella
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                                                            Sequence 431 AA;
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                                                                                field.)
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 μ.
                     20;
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                               Similarity
 INPETVPKPCCAPTQLNAIS 20
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                   100.0%;
ilarity 100.0%;
Conservative C
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(revised)
(first en
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90US-00483913.
90US-00569920.
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                                                                                                                                                                                                                                                                                                                                                                                                                note= "Claim 5"
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/note= "Claim 10"
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'note= "Claim 8"
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note= "Claim 7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      note=
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label= (
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ote= "Claim 9"
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                    Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
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                                        Length 431;
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                     Gaps
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28-MAR-1989; 04-MAY-1989; 23-JUN-1989; 23-JUN-1989;

04-OCT-1990. WO9011366-A

27-MAR-1990;

90WO-US001630

Cleavage-site Protein

Location/Qualifiers 299. .300 301. .431 /label= mature BMP-7

cartilage formation.

bone

morphogenic

protein-7; wound healing;

tissue

Homo

Human Bone Morphogenesis Protein-7.

25-MAR-2003 30-JAN-1991

(revised)
(first entry)

AAR07335;

AAR07335 standard; protein;

431 AA

15-NOV-1989; 17-NOV-1989; 07-MAR-1990;

23-JUN-1989;

89US-00329610 89US-00347559 89US-00370544 89US-00370547 89US-00370549 89US-00437050 89US-00437050 89US-0043703

Wang

EA,

Wozney JM,

Celeste

Ą

(GEMY)

GENETICS

INST

WPI; 1990-320266/42.

RESULT 102
AAR12106
ID AAR121
XX
AC AAR121

AAR12106 standard; protein; 431 AA

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386

INPETVPKPCCAPTQLNAIS

405

0

AAR12106;

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386

INPETVEKPCCAPTQLNAIS 405 INPETVPKPCCAPTQLNAIS 20 Query Match
Best Local Similarity
Matches 20; Conserv

Conservative

0;

Score 111; DB 2; Pred. No. 1.8e-06; ; Mismatches 0;

Length 431; Indels

0;

Gaps

0

100.0%;

Sequence

431

A,

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correct PA field.)

The positive clone PEH7-9 was identified from a human osteosarcoma cDNA library and its DNA insert was sequenced. It was found to contain the BMP-7 coding sequence. Mature active BMP-7 is expected to comprise a homodimer whose subunits are truncated versions of the BMP-7 proprotein. (See features) See also AAQ06166-Q06173, AAQ06187, AAQ06189-Q06192. (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003)

a cDNA the BMP

New bone morphogenic proteins, BMP-5, -6 and -7 - used for stimulating promoting and inducing bone and/or cartilage formation, wound healing a

and

Example; Page 65; 96pp; English.

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RESULT 104
AAR27289
ID AAR272
XX
AC AAR272
XX
DT 25-MAR
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                                                                                                                                                         Query Match
Best Local
                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                               Osteogenic polypeptides capable of inducing endochondral bone formation useful for bone and cartilage repair, treatment of osteoarthritis and correction of skeletal and dental abnormalities.
 25-MAR-2003
                                                                                                                                                                                                              The human OP1 gene encodes am immature translation product which is processed to a mature sequence of 139 amino acids ("OP1-18"). The mature hOP1 protein shows significant sequence homology (i.e. 98%) with the mature murine OP1 ("mOP1"). The sequences differ at only three positions. The prepro sequences share substantially less homology. See AAR23832 for murine OP1. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                              N-PSDB; AAQ24518.
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09-NOV-1992
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                      AAR27289;
                                             AAR27289 standard;
                                                                                                                                                                                           Sequence 431 AA;
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                                                                                                                                                                                                                                                                                                                                                                                              Ozkaynak E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human osteogenic protein hOP1-PP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR23833 standard; protein; 431 AA
                                                                                                                                                                                                                                                                                          Disclosure; Page 39-41; 54pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                          18-OCT-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-APR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9207004-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Prepro protein;
                                                                                                                                                                                                                                                                                                                                                                                                                     (CREA-) CREATIVE BIOMOLECULES INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Protein
                                                                                                    386
                                                                                                                        1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                             . Similarity 20; Conserv
                                                                                                    INPETVPKPCCAPTQLNAIS 405
                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (revised)
(first entry)
 (revised)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              osteogenesis; human hippocampus; OP1-18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note= "conserved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ocation/Qualifiers
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note= "conserved
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note= "mature
                                            protein; 431
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                                                                                                                                                        Score 111; DB 2;
Pred. No. 1.8e-06;
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RESULT 105
AAR44746
ID AAR447
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Best Local S
Matches 20
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01-JUL-2002
06-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                   Mature hOP1 is one of the preferred known morphogens which can be used in the manufacture of pharmaceuticals for inducing non-chondrogenic mammalian tissue growth, progenitor cell proliferation and hepatic tissue growth and for maintaining the phenotypic expression of differentiated cells in a mammal. Morphogens sharing at least 70% homology with hOP1 or at least 65% identity with residues 43-139 of hOP1 are included. (Updated on 25-MAR-2003 to correct PN field.)
08-APR-1988;
15-AUG-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Compens. for increasing progenitor cell population - contain a moto induce proliferation, useful for inhibiting neoplastic growth, inducing tissue repair and in diagnosis of tissue dysfunction.
                                                                                                                               Osteogenic protein; bone; cartilage; matrix; osteoarthritis; repair; vascularisation; mineralisation; differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB; AAQ28735.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human osteogenic protein hOP1.
                                    21-FEB-1992;
                                                          30-NOV-1993
                                                                                US5266683-A.
                                                                                                       Homo sapiens.
                                                                                                                                                               Osteogenic protein OP1.
                                                                                                                                                                                                                                     AAR44746;
                                                                                                                                                                                                                                                           AAR44746 standard; protein; 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 93-95; 132pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1992-331475/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cohen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-MAR-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Morphogen; morphogenic protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-FEB-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (CREA-) CREATIVE BIOMOLECULES INC
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20; Conserv
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                                                                                                                                                                                                                                                                                                                    INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kuberasampath T,
                                                                                                                                                                                                                                                                                                                                                                100.0%; ilarity 100.0%; Conservative
                                                                                                                                                                                     (revised)
(revised)
(first entry)
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 88US-00179406.
88US-00232630.
                                    92US-00841646
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pang RHL,
                                                                                                                                                                                                                                                                                                                                                                              Score 111; DB 2;
Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                      405
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                                                                                                                                                                                                                                                                                                                                                                                        Length 431;
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RESULT 106
AAR33931
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Best Local S
Matches 20
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17-CCT-1989
17-CCT-1989
22-FEB-1990
20-AUG-1990
07-SEP-1990
18-CCT-1990
18-CCT-1990
21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-FEB-1991;
20-DEC-1991;
28-JAN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The osteogenic protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bor formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarchritis. This is the preprior form of the protein. (Updated on 01-JUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-DEC-1990;
04-DEC-1990;
                                                                                                                                                        Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kuberasampath
                                                                                                                                                                                   Morphogen; homodimer; stimulate; proliferation; progenitor cell; differentiation; growth; redifferentiation; transformation; human; Drosophila; Xenopus; committed cells; hippocampus.
                                                           28-AUG-1992;
                                                                                           18-MAR-1993.
                                                                                                                         WO9305172-A1
                                                                                                                                                                                                                                                     Morphogen
                                                                                                                                                                                                                                                                                    25-MAR-2003
13-JUL-1993
(CREA-) CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pure mammalian osteogenic proteins -
ochondral bone formation when in assoc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1993-395405/49,
                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                 386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             431
                                                                                                                                                                                                                                                                                                                                                                  standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INPETVPKPCCAPTQLNAIS 20
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90US-00579865
90US-00599543
90US-00600024
90US-00616374
90US-00621849
90US-00621988
91US-00661162
91US-00601162
91US-00827052
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89US-00422613.
89US-00422699.
90US-00483913.
                                                                                                                                                                                                                                                  full length sequence.
                                                            92WO-US007359
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ozkaynak
                                                                                                                                                                                                                                                                                                                                                                protein;
                                                                                                                                                                                                                                                                                     entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 405
 INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rueger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ins - induce cartilage and association with a matrix.
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S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 431;
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                                                                                                                                                                                                         mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        bone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
RESULT 107
AAR33408
ID AAR33408
AC AAR334
XX AAR34
AC AAR
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Best Local S
Matches 20
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09-JAN-2003
15-JUL-1993
                                                                                           30-AUG-1991;
30-AUG-1991;
30-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Smart
                                                                                                                                                                                                                                                                      Key
Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR33408;
                Kuberasampath
Ozkaynak E,
                                                                                                                                                                                                                                                                                                                                                 morphogenic; osteogenic protein; developmental cascade; hOP-1; inflammation; anti-inflammatory; Transforming Growth Factor; TGF-beta super-family; hippocampus.
                                                                                                                                                                                                                                                                                                                                                                                                               Human OP-1-PP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR33408
                                                                                                                                                           28-AUG-1992;
                                                                                                                                                                                          18-MAR-1993
                                                                                                                                                                                                                        WO9304692-A1
                                                              (CREA-) CREATIVE BIOMOLECULES
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                                                                                                                                                                                                                                                                                                                     sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                               (revised)
(revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA;
                  Smart
                                                                                           91US-00752764.
91US-00752861.
91US-00753059.
                                                                                                                                                           92WO-US007358
                                                                                                                                                                                                                                                                                    ocation/Qualifiers
                  Pang
t JE;
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This sequence represents the human morphogen hOP1, isolated from the hippocampus. This morphogen is inactive when reduced but is active as an oxidised homodimer and when oxidised in combination with other morphogens. These morphogens are capable of stimulating proliferation of progenitor cell, stimulating the differentiation of progenitor cells, stimulating the differentiation of progenitor cells, stimulating the differentiated cells and supporting the growth and maintenance of differentiated cells, including the redifferentiation of transformed cells. These morphogens may also be capable of inducing redifferentiation of committed cells under appropriate environmental conditions. (Updated on 25-MAR-2003 to correct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Screening cpds. to determine ability to modulat morphogen - by assaying test tissue type cells of a prodn. level change of morphogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 85-87; 132pp; English.
                                                                                                                                                                                               appropriate environmental conditions. PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1993-100993/12
                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oppermann H,
Cohen CN;
100.0%; ! ilarity 100.0%; ! Conservative 0;
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      Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kuberasampath
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                                                                    Length 431;
             Indels
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          0
          Gaps
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standard;
                                                               INPETVPKPCCAPTQLNAIS
                                             INPETVPKPCCAPTOLNAIS
protein;
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RHL,

Oppermann

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Rueger

g,

Cohen

3

"contains conserved

7

cysteine skeleton"

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RESULT 108
AAR33905
ID AAR339
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Best Local
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                                                                                          30-AUG-1991;
30-AUG-1991;
30-AUG-1991;
                                                                                                                                                                                                                                                                                      Region
                                                                                                                                                                                                                                                                                                                                                           Bone; loss; increase; fracture; post-menopausal; senile; osteoporosis; hyperparathyroidism; skeletal microstructure defects; chronic renal failure; kidney disease; osteomalacia, vitamin D; deficiency-induced osteopenia, osteoporosis; Paget's disease; bone mass; imbalance; resorption; formation; dialysis; calcium; phosphate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   treating tissue damage in e.g. inflammatory disease, autoimmune disease, arthritis, psoriasis, dermatitis, diabetes and emphysema. Proteins havin at least 60% homology with amino acids 43-139 of the mature hOp-1 can also be used. See also AAR33398. (Updated on 09-JAN-2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 26; Page 112-113; 165pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Morphogen-induced modulation of inflammatory response - and resulting tissue damage, e.g. in autoimmune diseases, diabetes, asthma, ischaemia reperfusion injury, etc.
WPI; 1993-117208/14
                       Kuberasampath T, Pang RHL, Smart
                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-MAR-2003
21-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human osteogenic protein (OP)-1 is a preferred morphogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1993-100652/12.
N-PSDB; AAQ38733.
                                                                                                                                            28-AUG-1992;
                                                                                                                                                                   01-APR-1993.
                                                                                                                                                                                          WO9305751-A2
                                                                                                                                                                                                                              Region
                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                  metabolism.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Human osteogenic protein 1 (hOP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR33905;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR33905 standard;
                                                                                                                                                                                                                                                     Protein
                                                          (CREA-) CREATIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 386
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20; Conserv
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(first entry)
                                                                                          91US-00752764.
91US-00752857.
91US-00752861.
                                                                                                                                                                                                                                                protein"
293. .431
                                                                                 9205-00923780
                                                                                                                                            92WO-US007432
                       Cohen
JE;
                                                                                                                                                                                                                                                                                        Location/Qualifiers 30. .292
                                                          BIOMOLECULES INC
                                                                                                                                                                                                                    note=
                                                                                                                                                                                                                                        note= "mature protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein; 431 AA.
                                                                                                                                                                                                                              .43
                                                                                                                                                                                                                   "conserved seven cysteine skeleton
                                  Œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                  Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 111; DB 2,
Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                             cleaved
                                  Ξ
                                   Ozkaynak
                                                                                                                                                                                                                                                                            to yield mature, active
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 431;
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                                  'n
                                  Rueger DC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for use
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RESULT 109
AAR36734
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Best Local
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The sequence is that of the may be used in the prodn.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Use of morphogenic or in=vivo morphogenic-stimulating agent - to prevent bone loss or increase, used for treating bone fractures, post-menopausal or senile osteoporosis, hyperparathyroidism etc.
                                            Disclosure; Fig 3; 169pp; English
                                                                            Recombinant hetero-dimeric BMP proteins - defects, healing bone injury and in wound
                                                                                                                                                                                                                            04-NOV-1991;
07-APR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                         Bone morphogenetic protein; bone defect treatment; healing; wound; injury; tissue repair; osteoporosis; burns; incisions; ulcers; neuronal survival increase; fracture reduction; cartilage growth;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-MAR-2003
13-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                     WPI; 1993-167696/20.
                                                                                                                                                                                                                                                                         02-NOV-1992;
                                                                                                                                                                                                                                                                                                       13-MAY-1993
                                                                                                                                                                                                                                                                                                                                   WO9309229-A1
                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human BMP-7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 108-110; 162pp; English.
                                                                                                                                                                                                (GEMY ) GENETICS INST INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    386
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                                                                                                                       AAQ41293
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                                                                         healing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        431 AA;
                                                                                                                                                                 Wolfman NM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (revised)
(first entry)
                                                                                                                                                                                                                           91US-00787496.
92US-00864692.
                                                                                                                                                                                                                                                                         92WO-US009430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%;
   the human bone morphogenetic protein BMP-7. It n. of a recombinant heterodimeric protein having
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 111; DB 2;
Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    405
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                                                                            are user healing.
                                                                                        useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
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                                                                                            ä
                                                                                            treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a method for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                            bone
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bone stimulating activity. This heterodimer comprises BMP-2 or BMP-4

a

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RESULT 110
AAR54935
ID AAR549
XX AAR549
XX AAR549
XX AAR549
XX OSteog
XX Morpho
KW Morpho
KW OSteog
XX Homo. s
PN WO941C
XX 11-MA1
XX 03-NOI
PR 01-MA1
PR 01-MA1
PR 01-MA1
PR 01-MA1
XX ODPER
DR WPI;
DR N-PSD
XX A mor
PX A mor
PX A mor
PX Discl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CC fragment in association with a second protein or fragment, BMP-7. It may Co be used in compans. for wound healing, tissue repair, and in similar compans. which have been indicated for the use of individual BMPs. CC Increased potency of the heterodimer over individual BMPs may permit clower dosages to be administered. A heterodimeric protein which induces cartilage and/or bone growth in circumstances where bone is not normally formed, has applications in the healing of bone fractures and cartilage concepts in humans and other animals. The heterodimer may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. De novo bone formation conduced by an osteogenic agent contributes to the repair of congenital, trauma induced or oncologic resection induced craniofacial defects, and calso is useful in cosmetic plastic surgery. It may be used in the creatment of periodontal disease and in other tooth repair processes. It may also be useful in the treatment of osteoporosis, wound healing (e.g. curns, incisions and ulcers) and related tissue repair, and may increase neuronal survival and be useful in the transplantation and treatment of conditions exhibiting a decrease in neuronal survival. It may be combined with other agents beneficial to the bone and/or cartilage defect, wound cor tissue in question, e.g. EGF, PDGF, TGF-alpha, TGF-beta and insulincial would be useful of the processes of the growth factor (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
                                                                                                                                                                                                                                                                                                03-NOV-1992;
04-MAR-1993;
31-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Morphogenic protein; hOP-1-PP; OP-1; hOP1; hOP-1; tissue morphogenesis; osteogenic protein.
                                                              A morphogenically active protein MOP-3 -morphogenesis in mammals.
                                                                                                                                                                                                                                                                                                                                                                                     02-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAY-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Osteogenic protein hOP1-PP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-MAR-2003
15-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR54935;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 431
                                                                                                                                                                                            Oppermann H,
Cohen CM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9410203-A2
                                                                                                                                                                                                                                                        (CREA-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20;
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                                                                                                                                                                                                                                                          CREATIVE
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(first entry)
                                                                                                                                                                                                                Ozkaynak
                                                                                                                                                                                                                                                                                                92US-00971091.
93US-00029335.
93US-00040510.
                                                                                                                                                                                                                                                                                                                                                                                     93WO-US010520
                                                                                                                                                                                                                                                          BIOMOLECULES INC
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                                                                                                                                                                                                                Kuberasampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 111; DB 2;
Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                         for
                                                                                                                                                                                                                H
                                                                                                                                                                                                                Rueger
                                                                                       inducing tissue
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         431;
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9999999988
                                         A novel mouse morphogenic protein, OP3, has the sequence given in. AR54934, and is encoded by CDNA of sequence AQ65390. CDNA and protein sequences were also provided for human osteogenic protein OP1 (AAQ65391, AAR54935), mouse OP1 (AAQ65392, AAR54936), human OP2 (AAQ65393, AAR54937) as well as the genomic DNA sequence of human OP2 (AAQ65395). Generic sequences given in AAR54939- 40 accomodate homologies between OP1, OP2, OP3 and other morphogen protein family members. (Updated on 25-MAR-2003 to correct PN field.)
Sequence 431 AA;
                                                                                                                                                                 OP1 (AAQ65391,
65393, AAR54937)
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Query Match
Best Local S
Matches 20
386
                   ы
                                       20;
INPETVEKECCAPTQUARS 405
            INPETVPKPCCAPTQLNAIS
                                       Conservative
                                       0
                                      Score 111; DB 2;
Pred. No. 1.8e-06;
D: Mismatches 0;
                   20
                                       0
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Similarity

100.0%;

Length

Gaps

0

밁 Ś

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RESULT 111
ARA46731
ID ARA467
XX ARA467
XX ARA467
XX 25-MAR
DT 25-MAR
DT 25-MAR
DT 25-MAR
DT 25-MAR
XX human
XX human
XX human
XX Homo s
XX WO9403
XX 17-FEB
XX 29-JUL
XX 29-JUL
XX 16-SEE
PR 31-JUL
PR 31-JUL
PR 31-JUL
PR 31-JUL
PR 16-SEE
PR 04-MAR
PR 17-FEB
XX (CREA-
PI Kubera
XX WPI; 1
DR N-PSDE
XX WPI; 1
DR N-PSDE
XX WPI; 1
DR N-PSDE
XX CREA-
XX CREA-
XX CREA-
CC This s
CC mature
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CC alter(
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CC a
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25-AUG-1994
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human osteogenic protein; hOP1; morphogen; infant food formulation; tissue morphogenesis; tissue development; bone growth; morphogen-enriched nutritional product.

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17-FEB-1994,
                   WO9403075-A2
                                         sapiens
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31-JUL-1992; 16-SEP-1992; 04-MAR-1993; 31-MAR-1993; 29-JUL-1993; 92US-00923780. 92US-00946235. 93US-00029335. 93US-00040510. 93WO-US007190

Kuberasampath 'n, Cohen 8 Rueger DC, Oppermann Ή Pang

INC

(CREA-) CREATIVE BIOMOLECULES

Morphogen enriched dietary compositions and infant formula - enhancing tissue morphogenesis, development and viability, einfants, aged individuals and metabolic disorders, e.g. anore ula - capable of ty, e.g. in anorexia nervosa,

Claim 32; Page 110-112; 160pp; English

This sequence is the pro form of human osteogenic protein hOP1. The mature hOP1 and proteins having at least 70% homology with it are preferred morphogens for inclusion in new morphogen-enrished nutritional formulations. The formulations are dietary compositions suitable for geople at risk for tissue damage due to protein energy malnutrition or to altered metabolism function and infant formulations to enhance tissue development in an infant or juvenile. (Updated on 25-MAR-2003 to correct development PN field.)

Sequence

Disclosure; Page 119-121; 164pp; English

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ARESULT 112
AARSO1
XX
ARSO1
XX
25-MAR
DT 11-OCT
XX
25-MAR
DT 11-OCT
XX
Human
XX
Human
XX
Homo spithe
XX
MOP-1;
XX
MOP-1;
XX
MOP-16
XX
MOP-17
XX
MO
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                                                                                                    Query Match
Best Local S
Matches 20
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Best Local S
Matches 20
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04-MAR-1993;
31-MAR-1993;
                                                                                                                                                                                                                                                      Morphogens comprising an amino acid sequence sharing at least 70% homology with OP-1, OP-2, CBMP2, BMP3(fx), Vg1(fx), Vgr(fx), DPP(fx), GDF-1(fx), 60A(fx) and at least 80% homology with BMP5(fx) and BMP6(fx) are useful for maintaining the integrity of the gastrointestinal tract luminal lining in a mammal, including (1) limiting epithelial cell proliferation, (2) inhibiting ulcerative lesion formation, (3) inhibiting inflammation normally associated with ulcerative diseases, and/or (4) stimulating the repair of ulcerative lesions and the regeneration of the luminal tissue. Morphogens having at least 60% homology with residues 43-139 of mature hopel are included (claim 37-39). (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OP-1; OP-2; CBMP2; Vg1(fx); Vgr(fx); DPP(fx); GDF-1(fx); 60A(fx); BMP3(fx); BMP5(fx); Osteogenic protein; morphogen; morphogenic protein; gastrointestinal tract; luminal lining; epithelial cell; proliferation; ulcer; lesion; inflammation; regeneration; tissue.
                                                                                                                                                                                                            Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Maintaining integrity of gastrointestinal lining using a morphogen (stimulant) - for treating or preventing ulceration, also to inhibit endothelial cell proliferation and reduce side effects of cancer therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1994-118121/14.
N-PSDB; AAQ45116.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAR-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human OP-1.
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11-OCT-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CREA-) CREATIVE BIOMOLECULES INC
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386
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                                                                                                    20;
                                                                                                                                Similarity
                                    INPETVPKPCCAPTQLNAIS
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INPETVPKPCCAPTQLNAIS
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Ozkaynak E,
                                                                                                       Conservative
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93US-00029335.
93US-00040510.
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                                                                                                                              100.0%;
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Pred. No. 1.8e-06;
                                                                                                                              Score 111; DB 2;
Pred. No. 1.8e-06;
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  405
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                                                                                                          Mismatches
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                                                                                                                                                          Length 431;
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                                                                                                          Indels
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                                                                                                    Gaps
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ARESULT 113
AARS16
ID AARS16
XX 2-MAR
DT 01-JUL
DT 01-JUL
DT 08-JUN
DXX hOP1 h
XX h
XX cartil
DT 11-OCT
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DS 11-OCT
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XX US5354
XX US5354
XX US5354
XX 08-APR
PR 11-OCT
PR 11-AUG
PR 11-CT
PR 17-OCT
PR 17-OCT
PR 17-OCT
PR 17-OCT
CC AAQ72703 encodes AAR51644 human osteogenic protein 1 (hOp1), fragments of CC this protein consisting of residues 335-431, 316-431, 293-431, 300-431, CC 313-431, 315-431 and 316-431, are unglycosylated osteogenic polyeptides. CC Any two of these polypeptides can be disulphide bonded to form a dimer, CC which forms an essential component of an osteogenic protein. This protein CC is dispersed in a biodegradable matrix which can be implanted into a manuallian bone matrow cavity, here it can induce local cartilage, bone CC repair. This implant has the advantage of inducing all stages of bone CC repair. This implant has the advantage of inducing all stages of bone CC formation and of having a higher specific activity than other known CC biosynthetic materials. The implant can be used to repair non-union CC fractures and cartilage, treat osteoarthritis; and aid in periodontal, CC dental or craniofacial reconstruction. (Updated on 015-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-AUG-1990;
07-SEP-1990;
18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
04-DEC-1990;
04-DEC-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAR-2003
01-JUL-2002
08-JUN-1995
                                                                                                                                                                                                                                                                                                                                         Implantable device for inducing osteogenesis - comprises porous matrix contg. non-glycosylated dimeric, di:sulphide linked osteogenic protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           non-union fracture repair; allograft repair;
cartilage and endochondrial bone formation;
periodontal, dental and craniofacial reconst
                                                                                                                                                                                                                                                                                                        Claim 15; Col 63-68; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1994-324521/40.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hOP1; human osteogenic protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hOP1 human osteogenic protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-FEB-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (STYC ) STRYKER CORP
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D
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kuberasampath
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(revised)
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90US-00621849.
90US-00621988.
91US-00660162.
91US-00810560.
92US-00827052.
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90US-00600024.
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89US-00315342
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               reconstruction
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oppermann
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Sequence 431

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                                                                                                                                           Query Match
Best Local S
Matches 20
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Best Local
                                                                                                                                                                                                                                                                                                                                                                  The osteogenic protein is produced recombinantly in mammalian cell cultures, and may be provided to a site for bone induction in a mammal with a suitable matrix to allow infiltration, proliferation and differentiation of migrating progenitor cells. (Updated on 25-MAR-2003 correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Binding partners, esp. antibodies, specific for different forms osteogenic protein - for differentiating between mature and solutions complexed forms of the protein in culture media or serum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 osteogénic protein - for differentiating between complexed forms of the protein in culture media % \left( 1\right) =\left( 1\right) +\left( 1\right) +\left
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rueger DC,
Sampath KT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Osteogenic protein OP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAR-2003
30-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 46-47; 70pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1994-302971/37.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Osteogenic protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR60577;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9420539-A1
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386
                                                                                                                                           Similarity
20; Conserv
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                                                                                                                                                                                                                                                                                                  431
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                                           INPETVPKPCCAPTQLNAIS 20
INPETVPKPCCAPTQLNAIS 405
                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jones
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(first entry)
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293. .4
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                                                                                                                                       100.0%; s
100.0%; s
htive 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tucker RF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "mature sequence
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                                                                                                                                           Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
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                                                                                                                                                                                                                   Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 431;
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31-JUL-1992;
04-MAR-1993;
31-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     numan; nippocampus; osteogenic protein; OP-1; hOP-1; mature; injury; survival; neural cell; morphogen; chemical; mechanical; neuropathy; transected nerves; demyelinated cell; toxin; ethanol; Parkinsons; Alzheimers; Huntingtons chorea; amylotrophic lateral sclerosis; multiple sclerosis; neoplastic lesion; central nervous system; CNS; retinoblastoma; glial cell neoplasm; redifferentiation; neuroblastoma; peripheral nervous system; neurite; outgrowth; cell aggregation; cell adhesion; axonal, nerva reconcertion.
                                                                   Rueger DC,
Cohen CM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hop1.
WPI; 1994-065399/08
N-PSDB; AAQ56231.
                                                                                                                                                                                                                                                                                                                                                                 WO9403200-A1
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02-SEP-1994
                                                                                                                                                                                                                                                                        29-JUL-1993;
                                                                                                                                                                                                                                                                                                                      17-FEB-1994.
                                                                                                                                                                                                                                                                                                                                                                                                               Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                        myelin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR47290 standard; protein; 431 AA
                                                                                                                                    (CREA-) CREATIVE BIOMOLECULES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        adhesion; axonal; nerve in sheath.
                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                      Kuberasampath T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
(first entry)
                                                                                                                                                                               92US-00922813.
93US-00029335.
93US-00040510.
                                                                                                                                                                                                                                                                           93WO-US007231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                regeneration;
                                                                                         Oppermann
                                                                                      ä
                                                                                           Ozkaynak
                                                                                         μ
                                                                                         Pang
                                                                                           RHL;
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Using morphogens to improve survival of neural cells - also stimulating re-differentiation in transformed cells and prodn. of adhesion molecules, for treating traumatic injury, neuropathy and nerve cell cancers, etc.

Claim 23; Page 122-124; 176pp; English.

This sequence represents the human hippocampus derived protein, account of the invention for improving survival of neural cells. Morphogens such as this, can be used to treat (protect) cells which have suffered contential or mechanical injury, eg. transected nerves; demyelinated cells; cells exposed to toxins such as ethanol, and cells at risk because of neuropathies (such as Parkinsons and Alzheimers disease; Huntingtons contents, anylotrophic lateral solerosis or multiple sclerosis), or because of neoplastic lesions (esp. retino- blastoma or glial cell neoplasms). At the induce redifferentiation, morphogens such as this, are used to truduce redifferentiation, morphogens such as this, are used to treat composition and/or cell adhesion. These proteins stimulate complete axonal nerve regeneration, including vascularisation and reformation of the myelin sheath. Nerves can be regenerated over long distances, eg. cor 55-MAR-2003 to correct pN field.) (Updated on 25-MAR-2003 to correct 25-MAR-2003 field.)

Sequence 431 AA;

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                                   Matches
                                           Query Match
Best Local
386
                                   20;
                                           Similarity
INPETVPKPCCAPTQLNAIS
              INPETVPKPCCAPTQLNAIS
                                  100.0%; llarity 100.0%; Conservative 0
                                   0
                                 Score 111; DB 2;
Pred. No. 1.8e-06;
Mismatches 0;
                 20
405
                                                   Length 431;
                                   Indels
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RESULT 115 AAR47290

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AAR50236
                                                      Matches
                                                                Query Match
Best Local
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04-MAR-1993;
31-MAR-1993;
                                                                                                                                               Morphogens comprising an amino acid sequence sharing at least 70% homology with OP-1, OP-2, CBMP2, Vg1(fx), Vg7(fx), DPP(fx), GDF-1(fx), 60A(fx) are useful for maintaining liver function in a mammal, including means for regenerating lost or damaged hepatic tissue, means for enhancing viability and integration of hepatic tissue and organ transplants, and means for correcting liver function deficiencis, including means for enhancing diminished liver function due to tissue including means for enhancing diminished liver function due to tissue injury or disease. Morphogens having at least 60% homology with residues 43-139 of mature hOP1 are included (claim 43-44). Use of BMP3(fx), are included in the disclosure. (Updated on 25-MAR-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BMP3(fx); BMP5(fx); BMP6(fx); osteogenic protein; morphogenic protein; liver; regeneration; injury; transplant; gene therapy; hepatic tissue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAR50236 standard; protein; 431 AA
                                                                                                                                                                                                                                                                                                                              Use of morphogen(s) to induce liver regeneration - for treatment of cancer etc., also to improved integration tissue, in gene therapy etc. .
                                                                                                                                                                                                                                                                                                                                                                                                                              Kuberasampath T, i
Ozkaynak E, Smart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAR-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human OP-1.
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                                                                                                         Sequence 431 AA;
                                                                                                                                                                                                                                                                                                       Claim
                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1994-118148/14.
N-PSDB; AAQ45162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OP-1; OP-2; CBMP2; Vgl(fx); Vgr(fx); DPP(fx); GDF-1(fx); 60A(fx); BMP3(fx); BMP5(fx); BMP6(fx); osteogenic protein; morphogen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CREA-) CREATIVE BIOMOLECULES INC
                                                                                                                                   to correct PN field.)
 386
                                                                                                                                                                                                                                                                                                      42-42; Page 125-127; 176pp; English.
                                                      20;
                          ш
                                                                    Similarity
                           INPETVPKPCCAPTQLNAIS 20
                                                    100.0%; ilarity 100.0%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92US-00946238.
93US-00029335.
93US-00040510.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93WO-US008808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "amino acids 43-139 of mature claim 43-44"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers 335. .431
                                                                                                                                                                                                                                                                                                                                                                                                                              Rueger DC,
t JE;
                                                      0
                                                    Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
 405
                                                                                                                                                                                                                                                                                                                                                                                                                                           Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                            Pang
                                                                               Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                                                              RHL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human OP-1,
                                                                                                                                                                                                                                                                                                                                               repair of injury, of transplant
                                                                                                                                                                                                                                                                                                                                                                                                                                              Cohen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    integration;
                                                      0
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                                                      Gaps
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RESULT 117

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RESULT 118
AAR47250
ID AAR472
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AC AAR472
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DT 25-MAR
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AAR57972

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OP-1

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                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-SEP-1992;
04-MAR-1993;
31-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Morphogens comprising an amino acid sequence sharing at least 70% homology with OP-1, CBMP2, Vgl(fx), Vgr(fx), DPP(fx), GDP-1(fx), 60A(fx) and at least 80% homology with NP3(fx), BMP5(fx) and BMP6(fx) are useful for integrating an implanted tooth in a tooth socket and for inhibiting tissue loss associated with periodonatal disease or injury. Morphogens having at least 60% homology with residues 43-139 of mature hopp, are included (claim 30-32). (Updated on 25-MAR-2003 to correct PN borp, are included (claim 30-32).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Key
Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OP-1; OP-2; CBMP2; Vgl(fx); Vgr(fx); DPP(fx); GDF-1(fx); 60A(fx); BMP3(fx); BMP5(fx); BMP6(fx); tooth socket; alveclus; osteogenic morphogen; morphogenic protein; periodontal tissue; regeneration; tooth implant; integration; inhibition.
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR57971;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR57971 standard; protein; 431
     25-MAR-2003
                                                    AAR47250;
                                                                                                        AAR47250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 28-29; Page 86-89; 132pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      with periodontal disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Morphogen-induced periodontal tissue regeneration - used in integrating as implanted tooth in tooth socket or to inhibit tissue loss associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-PSDB; AAQ67311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1994-118107/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kuberasampath T, Ru
Smart JE, Ozkaynak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Smart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAR-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9406399-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-MAR-2003
11-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CREA-) CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                       386
                                                                                                                                                                                                                                                                                                                                                                                                                                              431
                                                                                                        standard;
                                                                                                                                                                                                                                       INPETVEKECCAPTQUNAIS 405
                                                                                                                                                                                                                                                                           INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                     100.0%; ilarity 100.0%; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (revised)
(first entry)
     (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92US-00945285.
93US-00029335.
93US-00040510.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 claim 30-32"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers 335. .431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "amino acids 43-139 of mature human OP-1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rueger DC,
ak E;
                                                                                                      protein; 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or injury.
                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                           Score 111; DB 2;
Pred. No. 1.8e-06;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HNC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oppermann H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cohen CM,
                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pang
                                                                                                                                                                                                                                                                                                                                                                                                     431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RHL
                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein;
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                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-JUL-1992;
04-MAR-1993;
31-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; hippocampus; osteogenic protein; OP-1; subunit; dimer; morphogenic activity; cysteine; morphogen; family; proteine; complex; soluble; aqueous solvent; therapeutic composition; symptom-alleviating; co-factor; antibody; diagnosis; assay; quantitate; mature.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Morphogenic mammals and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
                                                                                                                                                                                                                                                                                                                                  Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 3; Page 60-63; 120pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Jones WK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JUL-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9403600-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CREA-) CREATIVE BIOMOLECULES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1994-065689/08.
DB; AAQ56198.
                                                                                                                                            386
                                                                                                                                                                                        μ
                                                                                                                                                                                                                                      l Similarity
20; Conserv
                                                                                                                                                                                        INPETVEKECCAPTOLNAIS 20
                                                                                                                                            INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tucker RF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein soluble complex - for diagnosing tissue disorders.
                                                                                                                                                                                                                                    100.0%; ilarity 100.0%; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first
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93US-00029335.
93US-00040510.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Pref.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Pref. Pro-region,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rueger DC,
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                                                                                                                                                                                                                                    Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
                                                                                                                                            405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pro-region,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oppermann H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 8"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 regeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ထ္
                                                                                                                                                                                                                                                                                    Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ozkaynak
                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    e
E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tissue
                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                         0;
RESULT 120
AAW00236
ID AAW0023
XX AAW002
XX Y 21-NOV
DT 21-NOV
DT Human
XX Morpho
KW Morpho
KW Morpho
XX M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cDNA encoding the human osteogenic protein 1 (OP1) is given in AAT06038 The encoded protein (AAR85210) is used to isolate OP1 binding receptors ALK-2, ALK-3 and ALK-6 (see AAR85206, AAR85207, AAR85209, respectively)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Identifying osteogenic protein-1 receptor-binding analogue - useful the design of morphogen agonists and antagonists for therapeutic, diagnostic and experimental purposes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OP1 binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human osteogenic protein 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR85211;
                                                                                                                                                                                     Human osteogenic protein OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 12; Page 78-80; 95pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1995-393076/50.
N-PSDB; AAT06038.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dijke PT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-APR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9530003-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13-FEB-1996
                                                                                                                     morphogenesis;
                                                                                                                                            Morphogen;
                                                                                                                                                                                                                                           21-NOV-1996
                                                                                                                                                                                                                                                                                         AAW00236;
                                                                                                                                                                                                                                                                                                                                        AAW00236 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CREATIVE BIOMOLECULES I
LUDWIG INST CANCER RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Miyazano K,
                                                                                                                     osteogenic protein; dentine; sis; odontoblast; OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              receptor; osteogenic protein 1; morphogenesis; morphogen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94US-00236428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95WO-US005467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /label= C-terminal_cysteine_domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  label= Prepro_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         abel=
                                                                                                                                                                                                                                                                                                                                        protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 111; DB 2; 100.0%; Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sampath KT,
                                                                                                                                                                                                                                                                                                                                          431 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                405
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Heldin
                                                                                                                                                  tooth decay;
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Length 431; Indels

0

Gaps

0

RESULT 119
AAR85211
ID AAR852
XX

AAR85211 standard; protein; 431

8

Key Peptide

Location/Qualifiers
1. .29

Homo sapiens

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RESULT 121
AAR87537
ID AAR875
XX AAR875
XX 15-OCT
XX OSteog
KW OSteog
KW ARTICU
OX HOMO S
XX AFT
DE 14-DEC
XX O3-JUN
PR 03-JUN
XX OCREA-
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                                                                                                                                                                                                                                                                                    Best Loc
Matches
                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                        Human hippocampus full-length osteogenic protein OP-1 (AAW00236) includes a pro-sequence and the morphogenically active mature protein sequence (see also AAW00221) that includes a 7-Cys C-terminal domain. OP-1 can be expressed from intact or truncated cDNA (AAT33441) in prokaryotic or eukaryotic host cells. Mature OP-1 and other morphogens (see also AAW00222-35) are used to induce dentine morphogenesis, to seal dental cavities and to desensitise teeth to pressure and/or temp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAR-1995;
                            03-JUN-1994;
                                                                                                   Homo sapiens
                                                                                                                              Osteogenic protein; OP-1; cartilage; bone; skeleton; joint;
                                                                                                                                             Human osteogenic protein OP-1
                                                                                                                                                                 15-OCT-1995
                                                                                                                                                                                                                                                                                                                        Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                    cavities.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Region
                                              02-JUN-1995;
                                                                14-DEC-1995
                                                                                 WO9533502-A1
                                                                                                                    articular cartilage; replacement body part
                                                                                                                                                                                    AAR87537;
                                                                                                                                                                                                    AAR87537 standard; protein; 431
                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 50-52; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Use of morphogen(s), e.g. osteogenic proteins, on dentinal surfaces inducing dentine morphogenesis, desensitising teeth or sealing tooth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N-PSDB; AAT33441.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1996-412583/41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Charette MF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9626737-A1
           (CREA-) CREATIVE BIOMOLECULES INC
                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                  386
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                                                                                                                                                                                                                                                                                             Similarity
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                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                   INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                      Conservative
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                            94US-00253398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9508-00396930
                                              95WO-US006724
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /label=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /label= Sig_peptide
30. .292
                                                                                                                                                                  entry)
                                                                                                                                                                                                                                                                                            100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mat_protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7-Cys_C-terminal_domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pro_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RB;
                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                     Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
                                                                                                                                                                                                                                                   405
                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                      Length 431;
                                                                                                                                                                                                                                                                                      0
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AAR85757
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   Key
                                                                                                                                                                                                                                                                                                                  hop-1
                    Peptide
                                                                                                            Protein
                                                                                                                                                         Peptide
                                                                                                                                                                           Peptide
                                                                                                                                                                                             Peptide
                                                        Peptide
                                                                                           Peptide
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Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; osteogenic protein; hOP-1; murine; mOP-1; TGF-beta superfamily; transforming growth factor-beta; dimer; antibody; epitope; hippocampus; purification; implantable osteogenic device; bone formation; cranofacial; anomaly; skeletal; dental; endochrondral bone formation; non-union fracture; cartilage repair; osteoarthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This is osteogenic protein OP-1 which may be on the surface of a biocompatible, biodegradable matrix that allows attachment of infiltrating cells and comprises residues specific for various tissue types. This device is used for the in vivo replacement of articular cartilage or non-mineralised (especially avascular) tissue in skeletal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Device for in-vivo production of autogenous replacement body parts - comprises matrix coated with osteogenic protein, for infiltration of cells, partic. for replacement or repair of cartilage in skeletal joints.
                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAR-2003
19-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR85757;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cartilage or non-mineralised (especially avascular)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 34-36; 51pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-PSDB; AAT06771.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR85757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Khouri RK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1996-039987/04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          386
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20; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INPETVPKPCCAPTQLNAIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; ilarity 100.0%; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
(first entry)
                                            /label= OP7
/note= "hOP-1
Cys skeleton i
                                                                                                        .18. .431
/label= OP1-16Val
/note= "N-terminally truncated
/note= "N-terminal residue is
                                                                                                                                                                                                                               /note= "N-terminally truncated species, N-terminal residue is
                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                   note= "hOP-1 peptide,
                                                                                                                                                                                                                                                                                                                                   note= "hOP-1 peptide,
                                                                                                                                                                                                                                                                                                                                                                     note= "Prepro-peptide"
                                                                                                                                                                                 note= "Mature hOP-1"
                                                                                                                                                                                                                   8, claim 3"
                                                                                                                                                                                                                                                                   label= OP1-18Ser
                 label=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein;
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                               .431
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= OPS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                              protein species defining the conserved
in the active region, claim 1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 111; DB 2;
Pred. No. 1.8e-06;
protein species
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
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                                                                                                                                                                                                                                                                                                     claim 2"
                                                                                                                                                                                                                                                                                                                                     claim
                                                                                                                                                                                                                                                                                                                                      2
 defining the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                 mature hOP-1 protein Val, claim 3"
                                                                                                                                                                                                                                 mature hOP-1
Ser, opt. des
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 431;
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                                                                                                                                                                                                                                 re hOP-1 protein opt. designated
   conserved
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C. W.

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RESULT 123
AAW16365
ID AAW163
XX
AC AAW163
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This sequence represents the human osteogenic protein, hOP-1 has CC homology with proteins in the TGF-beta superfamily. Fragments of the hOP-CC protein can be used in the production of dimeric peptides which may be used in the generation of antibodies with binding specificities for costeogenic proteins. The antibodies with binding specifically to an epitope of the osteogenic protein and may be used in purification protocols. Osteogenic proteins, such as hOP-1, may be used in an CC implantable osteogenic device which allows predictable bone formation to CC correct acquired and congenital cranofacial and other skeletal or dental CC anomalies. They may be used to induce local endochrondral bone formation in non-union fractures and in other clinical applications including dental and periodontal applications where bone formation is required. Other potential applications include cartilage repair, e.g. in the treatment of osteoatthritis. The cDNA encoding this sequence was isolated CC from human hippocampal tissue. (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
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15-AUG-1988
23-FEB-1989
17-OCT-1989
17-OCT-1989
22-FEB-1990
20-AUG-1990
18-OCT-1990
18-OCT-1990
18-OCT-1990
04-DEC-1990
04-DEC-1990
04-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 431
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antibodies with osteogenic protein binding specificity - used in purification of osteogenic proteins, and as antigenic proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1996-010159/01.
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                                   AAW16365
                                                                                                   AAW16365
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20; Conserv
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                                                                                                   standard; protein; 431
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A,
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900S-00579865
900S-00599543
900S-00600024
900S-00616374
900S-00621988
910S-00621988
910S-0066162
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92US-00827052.
92US-00841646.
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88US-00232630
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90US-00483913.
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89US-00422613.
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                                                                                                                                                                                                                                                                                                                                                                                                   Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
                                                                                                                                                                                                                                                                       405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oppermann H,
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RESULT 124
AAW40190
ID AAW401
XX
AAW401
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AAW401
XX
AAW401
XX
OB-JUD
DT 08-JUD
DT 08-JUD
DT 08-JUD
DX
XX
OSteos
KW Chrone
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This is the amino acid sequence of the human osteogenic protein 1 (OP1) derived from hippocampal tissue. The invention relates to a novel soluble form of this protein and of OP2 (AAW16366), and especially to ligands binding these proteins, e.g. poly- or monoclonal antibodies. The ligands are especially able to differentiate between the soluble and mature forms of these proteins. The soluble forms of the proteins preferably comprises the C-terminal 6 or 7 Cys residues (i.e. for OP1 residues 335-431 (6 Cys)). The soluble complex comprises a pro domain of the protein non-covalently linked to a dimeric form of the osteogenic protein which containing at least the soluble part of OP1 and another osteogenic protein e.g. OP2, bone morphogenetic protein (BMP)-2, -3, -4, -5, -6 or -9. The ligand may be used to monitor the purity of therapeutic osteogenic protein preparations and for diagnostic purposes. (Updated on 25-MAR-2003 to correct PF field.)
Osteogenic protein; OP-1; bone morphogenic protein; OP/BI chronic renal failure; renal therapeutic agent; disease; nephropathy; glomerulopathy; hypertrophy; sclerosis; nepi dysplasia; fibrosis; glomerular filtration rate; GFR.
                                                                                                                                                                   Human OP-1
                                                                                                                                                                                                                                          08-JUN-1998
                                                                                                                                                                                                                                                                                                       AAW40190;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antibody specific for soluble form control and diagnostic use.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-FEB-1992;
04-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-MAR-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; osteogenic protein; hippocampus; soluble; ligand; antibody;
mature; non-covalent; dimeric; bone morphogenetic protein; purity;
                                                                                                                                                                                                                                                                                                                                                                          AAW40190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Col 19-22; 20pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tucker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US5610021-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-MAR-2003
26-AUG-1997
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20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                          standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INPETVPKPCCAPTQLNAIS
                                                                                                                                                                   protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 111; DB 2; ilarity 100.0%; Pred. No. 1.8e-06; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  diagnostic use.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AA;
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(first entry)
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93US-00027070.
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                                                                                                                                                                                                                                                                                                                                                                   protein;
                                                                                                                                                                                                                                       entry)
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Fi
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                                                                                                   OP/BMP
                                   nephritis;
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RESULT 125
AAW3683
ID AAW368
AC AAW368
AC AAW368
AC AAW368
CT 25-MAR
DT 10-MAR
AC Full 1
XX
KW Human
KW embryc
KW arthri
XX
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                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                            This sequence represents the human osteogenic protein, OP-1. This protein is used in a method for the treatment of a mammal having, or at risk of, chronic renal failure which comprises administering an osteogenic protein/bone morphogenetic protein (OP/BMP) renal therapeutic agent or morphogen. The method can be used for treating e.g. chronic renal failure, end-stage renal disease, chronic diabetic nephropathy, diabetic glomerulopathy, diabetic renal hypertrophy, hypertensive nephrosclerosis, hypertensive glomerulosclerosis, chronic glomerulonephritis, hereditary nephritis, renal dysplasia, or a patient afflicted with e.g. glomerular hypertrophy, tubular hypertrophy, glomerulosclerosis, tubulointerstitial sclerosis or renal fibrosis. Such therapeutic agents can prevent, inhibit or delay the progressive loss of functional nephron units and the progressive decline in glomerular filtration rate (GFR) which slowly but inevitably leads to the need for renal replacement therapy
               Human osteogenic protein; OP; OP-1; morphogen; morphogenic protein; embryogenesis; organ maintenance; tissue-specific morphogenesis; arthritis; emphysema; osteoporosis; cirrhosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Treatment of chronic renal failure - using an morphogenetic protein renal therapeutic agent mesenchymal progenitor cells.
                                                                       Full length
                                                                                                                                                                                                                                                                                                                                                                   Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sampath KT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-NOV-1997.
                                                                                                    10-MAR-1998
                                                                                                                                                                            AAW36853 standard; protein; 431 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-MAY-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-MAY-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                 25-MAR-2003
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                                                                                                                                                                                                                                                   386
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                                                                                                                                                                                                                                                                                                           l Similarity
20; Conser
                                                                                                                                                                                                                                                                INPETVPKPCCAPTQLNAIS 20
                                                                       sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Page 55-56; 113pp; English.
                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cohen CM;
                                                                                                    (revised)
(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97WO-US007816
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /label= OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              label=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /label= signal
                                                                                                                                                                                                                                                                                                                        100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       propeptide
                                                                       human osteogenic protein 1 (hOP-1)
                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                         Score 111; DB 2;
Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                     405
                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 or morphogen or renal
                                                                                                                                                                                                                                                                                                                                         Length 431;
                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                             Gaps
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RESULT 126

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                                                                                                                                    The present sequence represents a human osteogenic protein-1 (hOP-1). hOP C -1 was first found in bone tissue, and is now known to be produced at C relatively high levels in cells derived from renal or adrenal tissue. OP-1 proteins are a group of morphogenically active proteins. Morphogens are coxidised with other morphogens (e.g. AAM3684-62). Comparison of the C camino acid sequences of these morphogens has identified a consensus 6-7 crysteine motif at the C-terminal. Morphogenic proteins such as OP-1 play an important role, not only in embryogenesis, but also in tissue and corgan maintenance and repair in mammals. They induce a developmental cascade of tissue-specific morphogenesis in a mammal. A novel method is cascade of tissue-specific morphogenesis in a mammal. A novel method is cexpression of a cellular gene encoding a naturally occurring morphogenic contein. The candidate compound is incubated with epithelial cells which cells are assayed for the presence of or the amount of the protein contein relative to the level in the epithelial cells in the absence of the candidate compound is indicative of the amount of the protein contein relative to the level in the epithelial cells in the absence of the candidate compound is indicative of the absence of condulate expression of the cellular gene. A change in the level of the morphogenic condulate expression of the cellular gene. The method can be used to identify compounds which can increase or decrease morphogen production or levels. Such compounds can be used in the treatment of, e.g. arthritis, compounds can be used in the catement of, e.g. arthritis, and carrious of the liver. (Updated on 25-MAR-2003 to correct PR field.)
                                                                               Query Match
Best Local
                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-AUG-1991;
30-AUG-1991;
28-AUG-1992;
                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Screening for compounds which modulate morphogen expression incubating in the presence of epithelial cells which contain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1997-384665/35.
N-PSDB; AAT97877.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ozkaynak E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Col 49-52; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-MAR-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CREA-) CREATIVE BIOMOLECULES INC.
386
                                                                 20;
                                                                                   Similarity
                                                                                                                                    431
                       INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  morphogenic protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Smart JE;
                                                                  Conservative
                                                                                                                                    AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oppermann
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92US-00938021.
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91US-00752764.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "pro region which is cleaved to yield the mature morphogenically active protein" 293. .431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers 30. .292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "conserved 7 Cys skeleton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note= "mature protein"
                                                                               100.0%;
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                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  expression.
                                                                                 Score 111; DB 2;
Pred. No. 1.8e-06;
 405
                                                                    Mismatches
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                                                                                                     DB 2;
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                                                                                                 Length 431;
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08-DEC-1997 AAW27508;

(first entry)

osteogenic

protein

AAW27508 standard; protein; 431 AA.

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386 INPETVPKPCCAPTQLNAIS

405

AAW34783;

AAW34783 standard; protein; 431

Query Match Best Local S Matches 20

l Similarity 20; Conser

Conservative

0

Score 111; DB 2; Pred. No. 1.8e-06; Mismatches 0;

100.0%;

INPETVPKPCCAPTQLNAIS

RESULT 128 AAW53179

0

Sequence 431

AA;

AAT87879

Page 55-56;

64pp; English

Ichijo H,

Nishitoh H,

Sampath KT

(LUDW-)

CREATIVE BIOMOLECULES INC. LUDWIG INST CANCER RES.

13-AUG-1996;

96WO-US013163

14-AUG-1995;

WO9707135-A2 Homo sapiens

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AAW34783
ID AAW347
XX AAW347
XX O8-APR
XX O8-APR
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KW ischae
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KW canada
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                                                                                                                                                                                                                                                                                                                      This sequence represents the human osteogenic protein-1 (OP-1), and can be used in the method of the invention. The method is for enhancing recovery of central nervous system (CNS) function in a mammal afflicted with a CNS injury selected from ischaemia or trauma, and comprises: (i) administering a tissue specific morphogenesis inducing dimeric protein comprising: (a) a pair of folded polypeptides having at least 70% comprising: (a) a pair of folded polypeptides having at least 70% chomology to the carboxy terminal 7-cysteine domain of OP-1 (also known as bone morphogenic protein 7 (BMP-7)); (b) a pair of folded polypeptides computed to the protein 7 (BMP-7)); (b) a pair of folded polypeptides compuse OP-1 or OP-2 (also known as BMP-8), GDF-1, BMP-2A, BMP-3, BMP-5, BMP-6, 60A (Drosophila BMP-7) analogue) ppp (Drosophila BMP-2A) analogue), Vgl or Vgr-1, or a conservative substitution variant. The generic sequences were constructed to accommodate the homology to all of the proteins in part (ii) of the method. The method can be used to treat mammals whose CNS tissue had been damaged or lost due to stroke or a similar disruption in blood flow, or due to infliction of physical (e.g. mechanical) trauma affecting the CNS
                                                                                                                                   Matches
                                                                                                                                                                Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human osteogenic protein-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Administration of tissue specific morphogenesis inducing dimeric protein enhances recovery of CNS function in mammal afflicted with ischaemia or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1997-479990/44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CREA-)
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                                                                                                                                                                                                                                                                Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-MAR-1997;
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                                       1 INPETVPKPCCAPTQLNAIS
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                                                                                                                                                                    Similarity
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INPETVPKPCCAPTOLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Page 44-45; 72pp; English
                                                                                                                                100.0%; ilarity 100.0%; Conservative
                                                                                                                                                                                                                                                                    AA:
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                                                                                                                                Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
                                                                   20
                                                                                                                                                                                                Length 431;
                                                                                                                                       Indels
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This is a human osteogenic protein (hOP)-1 sequence. The osteogenic CC proteins are morphogenically active proteins and can be used in a method CC for identifying an epithelial cell tissue source in which the expression CC of a cellular gene encoding a protein comprising a naturally occuring CC polypeptide can be modulated with a compound shown to modulate gene cexpression. The method comprises incubating the epithelial cells with the CC compound until expression of the cellular gene has been modulated.

CC Assaying for the polypeptide where the change in the level of the polypeptide relative to the level in the epithelial cells incubated. CC without the compound indicates a epithelial cell tissue source in which the expression of the cellular gene is modulated. The polypeptide, when CC dimerised, has the property of inducing a developmental cascade of tissue specific morphogenesis. The polypeptide sequence can be selected from hop CC of the compound protein (mOP)-1, hOP-2, mOP-2, Drosophila CC eacapentaplegic gene product (DPP), Xenopus Vgl, murine Vgr-1, human CBMP corporators or materially occuring variants.
Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-MAR-1991;
30-AUG-1991;
30-AUG-1991;
28-AUG-1992;
                                                                                                  Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Method for identifying an epithelial cell tissue source which contains a cellular gene for morphogenic protein expression - by incubating at least two preparations of epithelial cells with a compound shown to modulate morphogenic gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB; AAV19533.
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Rueger DC, Smart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
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                                                                                                                                                     naturally
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91US-00752764.
91US-00752861.
92US-00938021.
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/note=
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/note=
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                     100.0%;
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                                                                                                                                                     occuring
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                     Score 111; DB 2;
Pred. No. 1.8e-06;
                                                                                                                                                        variants
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                                                 Length 431;
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                                                                                                                                                                                                                                                       ide, when of tissue of from hOP
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                      The present sequence represents human osteogenic protein OP1, which is used in the present invention. The present invention describes methods for selectively extracting an osteogenic protein (OP) from a mixture. The method comprises: (a) exposing the mixture to an antibody that specifically binds OP, separating the resulting antibody-protein complex from the mixture, and dissociating the complex. In the methods OP comprises a pair of oxidised subunits that are dissulphide-bonded to form a dimer, and one of the subunits has an amino acid (aa) sequence sufficiently homologous to residues 335-431 of a 431 aa protein designated OPS, sequence given in the specification. In dimeric form OP is capable of inducing cartilage and endochondral bone formation in a mammal when disposed within a matrix implanted in the mammal. The methods are used for recovering the recombinant proteins from cell cultures
                                                                                                                                                                                                                                    for novel protein(s)
                                                                                                                                                                                                                                                                                                                                                                                                                                             21-NOV-1990;
04-DEC-1990;
04-DEC-1990;
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20-AUG-1990;
07-SEP-1990;
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17-OCT-1989;
17-OCT-1989;
                                                                                                                                                                                                                                                                                     WPI; 1998-158353/14.
N-PSDB; AAV15204.
Sequence 431
                                                                                                                                                                                                                                              Extraction of osteogenic protein from mixture - using antibodies specific for novel polypeptide chains useful as subunit(s) of dimeric osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW44302 standard; protein; 431
                                                                                                                                                                                                           Disclosure;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; osteogenic protein; OP1; subunit; endochondral
                                                                                                                                                                                                                                                                                                                                                      (STYC)
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                                                                                                                                                                                                                                                                                                                                                       STRYKER CORP.
                                                                                                                                                                                                                                                                                                                             Rueger DC,
                                                                                                                                                                                                           Col 65-68; 127pp; English
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91US-00810560.
92US-00827052.
92US-00841646.
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90US-00616374.
90US-00621849.
90US-00621988.
91US-00660162.
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Matches Query Match Best Local (

Similarity

100.0%; Score 111; DB 2; 100.0%; Pred. No. 1.8e-06;

Conservative

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                                                                                                                                                                                                                                                                                                                               Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The osteogenic protein is used, along with a matrix derived from a non-synthetic, non-polymeric material and a binding agent, to create a device for inducing local formation of bone or cartilage. The devices are used for local repair of bone, cartilage and osteochondral defects (e.g. (non-critical size, segmental non-union, osteochondral or subchondral defects, or non-union fractures) and induces formation of endochondrial bone or articular cartilage. Particular applications are in repair of degenerative/deteriorative conditions (e.g. osteochondrits dessicane); in conditions requiring much reconstructive surgery; prosthesis repair; spinal fusions; scoliosis; carnial/facial repair and massive allograft
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Device for inducing growth of bone and cartilage containing osteogenic protein - formulated with non-synthetic, non-polymeric matrix and bind agent, produces stable repairs with only small doses of protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; osteogenic protein; bone; cartilage; osteochondral defect; endochondrial bone; articular cartilage; prosthesis repair; spinal fusion; scoliosis; allograft repair.
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                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CREA-) CREATIVE BIOMOLECULES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1998-520968/44.
DB; AAV60227.
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                                                                                                                                                                                                                                                                                                  l Similarity
20; Conserv
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                                                                                                                                                                                                                          INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                INPETVEKECCAPTOLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tucker MM,
                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                               100.0%;
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                                                                                                                                                                                                                                                                                               Score 111; DB 2;
Pred. No. 1.8e-06;
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                                                                                                                                                                                   405
                                                                                                                                                                                                                                                                                                                                                                Length 431;
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AAW48910
ID AAW4
XX
AC AAW4
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DT 28-5
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                                                                                                                                                                                   RESULT 132
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RESULT 131
AAW80749
ID AAW807
XX

AAW80749 standard; protein; 431 AA

28-SEP-1998

(first entry)

AAW48910

standard;

protein;

431

386

405 20

INPETVPKPCCAPTQLNAIS INPETVPKPCCAPTQLNAIS

20;

Indels

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Criming is the amino acid sequence of human osteogenic protein (OP1). A Calimed method of inducing bone formation sufficient to fill a defect clocus defining a void comprises providing to the locus, an osteogenic convicts device comprising an osteogenic protein dispersed in a biocompatible, non crigid, amorphous carrier having no defined surfaces. Suitable osteogenic proteins include OP1, OP2, bone morphogenetic proteins 2, 3, 4, 5, 6, 7, 8, 9, CC 10, 11, 12, 15, and 3b, DPP, Vg1, Vgr, 60A, and GDF 1, 3, 5, 6, 7, 8, 9, CC 10, or 11. A claimed method for enhancing the quantity or quality of CC allus formation at an osteogenic defect locus in a mammal involves administering a device that comprises osteogenic protein dispersed in a Diocompatible, non-rigid amorphous carrier having no defined surfaces. CC The osteogenic protein is selected from OP1 or OP2 (see AAW80750 for CC osteochondfal defects. They are able to accelerate the rate, and enhance the quality of bone contains and contains and enhance the quality of bone contains and contains and enhance the quality of bone contains and contains and enhance the quality of bone contains and contains and enhance the quality of bone contains and enhance the quality of bone contains and contains and enhance the quality of bone contains and contains and enhance the quality of bone contains and contains and enhance the quality of bone contains and contains and enhance the quality of bone contains and contains and enhance the quality of bone contains and contains and enhance the quality of bone contains and contains and enhance the quality of bone contains and cont
Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Inducing or accelerating bone formation in defects - using an osteogenic protein alone or dispersed in a non-rigid, amorphous carrier.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPF; 1998-542236/46.
N-PSDB; AAV65199.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
Domain
                                                                                              Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-FEB-1997;
29-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-FEB-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Osteogenic protein; osteogenic device.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human osteogenic protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9834655-A1
                                                                                                                                           formation in non-critic injectable composition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (CREA-) CREATIVE BIOMOLECULES
                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Page 63-64; 79pp; English.
100.0%; Score 111; DB 2; ilarity 100.0%; Pred. No. 1.8e-06; Conservative 0; Mismatches 0;
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97US-0047909P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "7-cysteine domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OP1; human; bone morphogenetic protein; morphogen;
                                               Length 431;
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В
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                                                                                                                           Matches
                                                                           Query Match
Best Local :
                                                                                                                                                                             produce replacement tissue. A preferred morphogen is the claimed sevent cysteine domain of human OP-1. The method is used to treat disorders of eye, ear or nose, especially ophthalmic tissue which has been damaged, surgically, accidentally, as a result of exposure to cold, light, chemicals etc., by pathogens or by degenerative disorders (specifically cataracts, scotomata, glaucoma, photophobia or night blindness).

Especially the morphogen: (a) promotes regeneration of damaged retina or cornea; (b) prevents retina from becoming anergic; (c) causes regression of neovascularisation by inhibiting anglogenesis; (d) induces neurite extension in retinal cells; (e) normalises intraocular pressure and light transmittability in transparent eye tissue; (f) maintains accommodation (prevents loss of lens elasticity); (g) accelerates integration of
                                                                                                                                                                                                                                                                                                                                                                        This polypeptide comprises human hippocampus osteogenic protein (OP-1) claimed method of preserving or restoring a placode-derived sense perception organ of neuroectodermal origin (especially an eye, nose or ear) in a vertebrate involves providing a morphogen to the organ or alternatively providing morphogen-stimulated progenitor cells (PC) to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Preserving or restoring percipient function of eye, ear for, e.g. treating ophthalmic disorders such as macular glaucoma, cataract or retinal detachment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OP-1; osteogenic protein 1; human; morphogen; sense perception; cataract; scotomata; glaucoma; photophobia; night blindness; retinal detechment;
                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 6; Page 74-75; 130pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sjorgen's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human osteogenic protein 1
                                                                                                                                                      treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-NOV-1997;
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                                                                           Similarity
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                                                                                                                                                    s loss of lens elasticity), (g) accelerates integration of es, and (h) maintains lachrymal gland function (specifically Sjorgen's syndrome) (all claimed)
 INPETVPKPCCAPTQLNAIS 405
                              INPETVPKPCCAPTQLNAIS 20
                                                                                                                         431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                syndrome
                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rueger DC,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /label= Seven-cysteine_domain
/note= "(Claim 6)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'label= Pro_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 label= Sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        label=
                                                                           100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (OP-1)
                                                            0
                                                                           Score 111; DB 2;
Pred. No. 1.8e-06;
                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Charette MF
                                                                                          Length 431;
                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       or nose - use
degeneration,
                                                             0
                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                           (OP-1).
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RESULT 133

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RESULT 134
AAY17391
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Best Local
                                                                                                                                                                                                                                                                                                                                                                           This is the amino acid sequence of the morphogenically active oestrogenic protein-1 (OP-1), used in the method of the invention to treat symptoms of sensory perception deficit. This maintains, and restores or preserves sensory perception. Specifically OP-1 is used in cases of hearing loss caused by loss of sensory hair cells, e.g. as a result of treatment with aminoglycoside antiblotics, cisplatin or sound. More generally it can be used in human or veterinary medicine to treat any neural tissue injury or neuropathy. Typical of many examples are corneal wounds, ophthalmic neovascularisation, macular degeneration, torn rettina or ophthalmic inflammation. The function of OP-1 may be replaced by an agonist
          Human; osteogenic protein; OP-1; OPX; morphogen; stroke; neuronal cell loss; Alzheimer's disease; Parkinson's disease; Huntington's disease; senile dementia; alcohol-induced dementia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Treating symptoms of sensory perception deficit using morphogen(s) useful for, e.g. maintaining, restoring or preserving sensory hair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Morphogen; oestrogenic protein-1; OP-1; sensory perception deficit; hearing loss; sensory hair cell; aminoglycoside antibiotic; cisplatin; human; ophthalmic neowascularisation; macular degeneration; torn retina; ophthalmic inflammation; agonist.
                                                                                                                                                         AAY17391 standard; protein; 431 AA
                                                                                                                                                                                                                                                                                                                                                   Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sampath K,
                                                                                                 22-JUL-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Morphogenically active oestrogenic protein-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-OCT-1998
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DB; AAV41572.
                                                                                                                                                                                                                                 386 INPETVPKPCCAPTOLNAIS 405
                                                                    osteogenic
                                                                                                                                                                                                                                                                                         20;
                                                                                                                                                                                                                                                             1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 62-63; 82pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rueger DC,
                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                (first entry)
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                                                                    protein OP-1.
                                                                                                                                                                                                                                                                                                       100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            English.
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                                                                                                                                                                                                                                                                                                     Score 111; DB 2;
Pred. No. 1.8e-06;
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                                                                                                                                                                                                                                                                                            Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jin
                                                                                                                                                                                                                                                                                                                       Length 431;
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RESULT 135
AAW86382
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Best Local S
Matches 20
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  30-MAY-1997;
30-MAY-1997;
30-MAY-1997;
                                                                                                                                                                                                                                                                                              Osteogenic protein; OP-1; tissue morphogenesis; morphogenic protein; bone fracture; osteochondrial defect; myocardium; infarction; axonal nerve regeneration; liver cirrhosis; ulcerative bowel disease emphysema; inflammatory disease; lung.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 16; Page 58-59; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                        Human osteogenic protein 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAW86382 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Potentiating morphogen activity useful for treating Parkinson's disease and Huntington's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-OCT-1997;
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                                                                                                                                                    03-DEC-1998.
                                                                                                                                                                                                                                                 Homo sapiens
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                                                                                                  29-MAY-1998;
                                                                                                                                                                                                   WO9854572-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1999-326638/27.
DB; AAX56414.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INPETVPKPCCAPTQLNAIS 405
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97US-0048062P.
97US-0048063P.
97US-00866827.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 111; DB 2; 100.0%; Pred. No. 1.8e-06; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Higgins D;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alzheimer's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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useful
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日 8

(CREA-) CREATIVE

BIOMOLECULES

WO9937320-A1

Domain

/label= Carboxy_terminal_active_domain /note= "Conserved pattern of cysteine residues"

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RESULT 136
AAY286
AY286
XX
AAY286
XX
DT 19-OCT
XX
Human
X
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Comprises: (1) creating a local permissive defect site in a mammal; (2) comprises: (1) creating a local permissive defect site in a mammal; (2) comprises: (1) creating a local permissive defect site in a mammal; (2) comparises: (1) creating a candidate MP systemically to the mammal; and (3) comparises of the MP, e.g. to evaluate dosage, to cand pharmacokinetic properties of the MP, e.g. to evaluate dosage, to condition at the defect site. The test method is used to assess efficacy condition at the defect site. The test method is used to assess permission at the condition of the MP, e.g. to evaluate dosage, to condition at the condition of supplementary agents. Osteogenic proteins (0P) are particularly used to repair bone fractures, consteoded to treat defects and defects too large to heal naturally. MP are cused to treat defects and defects too large to heal naturally. MP are used to treat defects in a very wide range of tissue, e.g. the myocardium conditions of the condition o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                               Human osteogenic protein 1; hOP 1; morphogenic protein; TGF-Beta; cognitive function; progenitor cell; functional replacement tissue; precursor; cysteine conserved pattern; carboxy terminal active domain; memory dysfunction; neuroprotective effect; brain tissue damage; trauma; oxygen deprivation; glucose deprivation; neurotoxin; dementia; senility; neurodegenerative disorder; cardiac arrest; glucose metabolism disorder; Alzheimer's disease; pro-domain; anorexia; Parkinson's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Evaluating systemic activity of morphogenic proteins at localised defect sites - useful for determining pharmacokinetics and efficacy of morphogenic and osteogenic proteins for systemic treatment of tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human osteogenic protein 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAY28656;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 431
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sampath
                                                                                                                                                                                                                                                                                                                 Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         has been developed for evaluating the morphogenic activity of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cohen CM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
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Pred. No. 1.8e-06;
; Mismatches 0;
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ARREULT 137
AAW896
XX AAW896
XX AAW896
XX AAW896
XX 20-MAR
DT 20-MAR
DT 24-MAR
XX Human
XX Human;
XW cartil
XW cortil
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XX Homo 
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Best Local
15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
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                                                                                                                                                                                                                                                                                                                                                                                                   Human; osteogenic protein; OP-1; OPX; endochondral bone formation; cartilage; craniofacial defect; skeletal disorder; dental disorder; non-union fracture; osteoarthritis; vascularisation; mineralisation; bone marrow differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAW89679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     trauma, oxygen or glucose deprivation, neuro-toxin, a neurodegenerative disorder or dementia. The subject may be afflicted with cardiac arrest, Alzheimer's disease, senility, glucose metabolism disorder, anorexia and Parkinson's disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 15a; Page 63-64; 74pp; English
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N-PSDB; AAX80559.
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                                                                                                             08-APR-1988;
                                                                                                                                                                       23-MAY-1995;
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24-MAR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CREA-) CREATIVE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INPETVEKECCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 431 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (revised)
(first entry)
88US-00179406.
88US-00232630.
89US-00315342.
89US-00422613.
89US-00422699.
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Pred. No. 1.8e-06;
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RESULT 138
AAW95448
ID AAW954
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CC The present invention describes isolated DNA (I) encoding at least one costeogenically active region of human osteogenic procein-1 in prepro form (C(P1-PP), murine OP1-PP) murine OP2-PP or human OP2-PP. Also described CC are: (A) DNA related to (I) encoding a polypeptide able to form dimers that can induce cartilage and endochondral bone formation in a mammal CC when implanted in a matrix; (B) vectors containing (I) or related DNA; (C) host cells transformed with this vector; (D) DNA (I') encoding a correspondence of processor of transformed mammalian cells, able to induce bone and cartilage formation; (F) mature OP1 corrected from mammalian cells following expression of the sequence that concides hOP1-PP; and (G) production of an active osteogenic composition by truncating mature OP1 protein. Host cells of (C) are used to produce proteins able to induce cartilage and bone formation, e.g. for correction of acquired or congenital cranicfacial defects or other skeleral or constead adisorders; to heal non-union fractures; to repair cartilage, e.g. in osteogenthitis, or generally wherever bone formation is required. The proteins induce complete development of endochondral bone, including constead is sequence represents human OP1. (Updated on 20-MAR-2003 to correct constends in the processor of the sequence represents human OP1. (Updated on 20-MAR-2003 to correct constends and correct to the processor of the sequence represents human OP1. (Updated on 20-MAR-2003 to correct constends and correct to the processor of the sequence correct to the processor of the correct of the sequence represents human OP1. (Updated on 20-MAR-2003 to correct constends and correct to the processor of the sequence correct to the sequence correct to the sequence represents human OP1. (Updated on 20-MAR-2003 to correct to the sequence constants human OP1. (Updated on 20-MAR-2003 to correct to the sequence represents human OP1.
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Matches
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21-NOV-1990;
04-DEC-1990;
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20-AUG-1990;
07-SEP-1990;
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polycystic
  Cystic kidney disease; renal; therapeutic; osteogenic protein; OP; bone morphogenic protein; BMP; growth factor-beta superfamily; polycystic kidney disease; multicystic dysplastic kidney disease;
                                                                                                                              26-MAR-1999
                                                                                                                                                                      AAW95448;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Col 63-66; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic acid encoding mammalian osteogenic proteins in prepro form - ab to induce cartilage and bone formation when implanted in matrix, useful
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22-FEB-1991
                                                                               Human osteogenic
                                                                                                                                                                                                           AAW95448 standard; protein; 431 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RHL,
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                                                                                                                                                                                                                                                                                                                   386
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                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                   INPETVPKPCCAPTQLNAIS 405
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                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
llarity 100.0%;
Conservative 0
                                                                                                                              (first entry)
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91US-00810560.
92US-00827052.
92US-00841646.
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90US-00569920.
90US-00579865.
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90US-00621988.
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90US-00616374.
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                                                                                 protein 1 (OP1).
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                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                       Score 111; DB 2;
Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                       Indels
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uraemic medullary cystic disease; human; OP1

12-NOV-1998. WO9850061-A1 Homo sapiens

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AAY2403
ID AAY240
XX AAY240
XX AAY240
XX O8-SEP
XX MOUSE;
XW OP-1;
XW MOUSE;
XW OP-1;
XW CEllul
XX ADOPEC
XW ADOPEC
XW ADOPEC
XW CELLUL
XX ADOPEC
XW ADOPEC

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to methods for treating cystic kidney diseases. The CC method comprises administering an effective amount of a renal therapeutic agent or a polynucleotide encoding the therapeutic agent. The therapeutic cc agent is preferably a soluble or membrane bound polypeptide, e.g. a commember of the osteogenic protein/bone morphogenic protein (OP/BMP) family compared by the compared protein (OP/BMP) family cc within a transforming growth factor-beta superfamily of proteins. It is cc especially one of the polypeptides hOP1, hOP1-PP, OP1-18Ser, OP8, OP7, CC OP1-16Ser, OP1-16Leu, OP1-16Met, OP1-16AN1a, OP1-16Val, mOP1, mOP1-PP, CC OP1-16Ser, OP1-16Net, OP1-16Net, OP1-16Val, mOP1-PP, CC OP1-16Ser, OP1-16Net, OP1-16Net, OP1-16Val, mOP1-PP, CC OP1-16Net, OP1-16Net, OP1-16Net, OP1-16Val, MOP1-PP, CC OP1-16Net, OP1-16Net,
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Best Local
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                                                                                                                                                                                                                                      Mouse; type 10 collage promoter; AP1 sequence A; osteogenic Op-1; morphogen; bone morphogenic protesin; BMP; soft tissue apoptosis; morphogen-activated regulatory pathway; tumour; cellular immune rejection; viral disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gjorstrup P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-MAY-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Human osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY24093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY24093 standard; protein; 431 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-070084/06
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                                                                                                                                                                                                                                                                                                                                                                                                                                       protein OP-1.
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                                                                                                                                                                                                                                                                                                                                                            protein;
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24-JUN-1999 WO9931136-A2

14-MAR-1998; 12-MAR-1999;

98US-0078027P 99WO-US005533. 23-SEP-1999

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AAY42797
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AC AAY4
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AC AAY4
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Best Local S
Matches 20
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                                                                                                                                                                                                                                                                          Key
Domain
                                                                                                                                                                                                                                                                                                                                                                                                                       Osteogenic protein; OP-1; bone morphogenetic protein 7; BMP-7; differentiation; proliferation; morphogenesis; morphogen; dimer; heterodimer; homodimer; cysteine; mesenchymal cell; stem cell; pluripotent; multipotent; progenitor; modulation; bone; osteogenesis; adipogenesis; tissue; repair; regeneration; maintenance.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human osteogenic protein OP-1.
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01-DEC-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-DEC-1998;
                                                                                                                                                                                      WO9947156-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (CREA-) CREATIVE BIOMOLECULES INC.
                                                                                                                                                                                                                                                                                                                                                                   sapiens
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DB; AAX83980.
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98US-0110498P.
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                                                                                                                                                                                                                                                                          Location/Qualifiers 330. .431
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                                                                                                                                                                                                                                                "Active seven-cysteine C-terminal domain"
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RESULT 141
AAY43108
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                       Chondrogenic protein; biodegradable matrix; cell proliferation; cell differentiation; migratory progenitor cell; cartilage formation; allogenic implant; xenogenic implant; endochondral bone formation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New composition useful for modulating cell differentiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1999-601070/51.
                                                                                                       US5958441-A.
                                                                                                                                       Homo sapiens
08-APR-1988;
                                 24-MAY-1995;
                                                                                                                                                                       osteogenic protein.
                                                                                                                                                                                                                                                               Human osteogenic protein 1 sequence.
                                                                                                                                                                                                                                                                                                  16-DEC-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                      AAY43108 standard; protein; 431 AA
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                                                                   28-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       repair, regeneration and maintenance of tissue
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 INPETVPKPCCAPTQLNAIS 20
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20; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Page 37-38; 43pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                            INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; ilarity 100.0%; Conservative (
88US-00179406
                                 95US-00449699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
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Pred. No. 1.8e-06;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
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RESULT 142
AAW86339
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Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-AUG-1988;
23-FEB-1989;
17-OCT-1989;
                                                                                            Human; osteogenic cartilage; OPX; ca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Implant for mammals permitting the influx, proliferation and differentiation of migratory progenitor cells, useful for inducing endochondral bone formation in mammals.
                                                                               cartilage; OPX; c cosmetic surgery.
                                                                                                                              Human osteogenic protein OP-1.
                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Col 61-64; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB;
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           19-NOV-1998
                                 WO9851354-A2.
                                                          Homo sapiens
                                                                                                                                                         15-MAR-1999
                                                                                                                                                                                 AAW86339;
                                                                                                                                                                                                        AAW86339 standard; protein; 431 AA
                                                                                                                                                                                                                                                                                                                                                                                           formation in mammals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-DEC-1991
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                                                                                                                                                                                                                                                                    386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                   l Similarity
20; Conser
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                                                                                                                                                                                                                                                                                                                                                                     431 AA;
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                                                                                                                                                                                                                                                                                                                  100.0%;
llarity 100.0%;
Conservative 0;
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90US-00621988.
91US-00660162.
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89US-00315342.
89US-00422613.
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92US-00827052.
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                                                                                           ic protein; OP-1; osteogenesis; morphogen; bone repair;
calcium phosphate matrix; metal implant;
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                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                      Score 111; DB 2;
Pred. No. 1.8e-06;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                            Length 431;
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15-MAY-1998;

98WO-US009951

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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A method has been developed for promoting new bone growth at a bone defect site in a mammal. The method involves; (1) implanting a calcium phosphate matrix, comprising at least one osteogenic protein, at the defect site; or (2) implanting at least one osteogenic protein as a coating on a metal implant. The present sequence represents human osteogenic protein op-1. The method is used to repair all types of bone and/or cartilage defects, particularly in bones of the face (mandible or maxilla) or in cosmetic surgery. The metal implants are used to repair app fractures. Use of a calcium phosphate matrix greatly improves the structure of the new bone growth, especially in bont, irregular or flat bones (e.g. in head, face, hands and feet). The devices increase both rate and quality of new bone, particularly in compromised subjects such
                                                                                                                                                                                                                                            OP-1; human; vector; morphogen expression; vascular disease; restenosis; vascular smooth muscle cell; proliferation inhibitor; atherosclerosis; vascular proliferative disease; angioplasty; therapy; collagen; extracellular matrix protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 3; Page 29-30; 58pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Inducing growth of new bone at a defect using osteogenic protein - incorporated in calcium phosphate matrix or coated on metal implant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB; AAV80656.
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14-MAR-1998;
                                                                                                                                                                                                                                                                                                                      Human OP-1 protein sequence.
                                                                                                                                                                                                                                                                                                                                                                                                             AAY18144 standard; protein; 431 AA
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                                                                                                  04-DEC-1997;
                                                                                                                               30-NOV-1998;
                                                                                                                                                          10-JUN-1999
                                                                                                                                                                                       WO9928341-A2
                                                                                                                                                                                                                   Homo sapiens
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                                                                      (CREA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      386
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                                                                      CREATIVE BIOMOLECULES INC
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98US-00039107
                                                                                                  97US-0067690P.
                                                                                                                               98WO-US025398
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100.0%; Pred. No. 1.8e-06;
tive 0; Mismatches 0;
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XTXTXOOOOOOOOOOOOO
                                                  This sequence represents the human OP-1 protein. The invention relates to CC a vector for the expression of a morphogen in a mammalian cell. The CC vector comprises DNA encoding a morphogen comprising an amino acid comprises DNA encoding a morphogen comprising an amino acid comprises bna encoding a morphogen comprising an amino acid comprises including the conserved seven cysteine domain of OP-1. Vascular CC disease are characterized by an excessive build-up of vascular smooth comprising the morphogen are used to inhibit proliferation of smooth comprising the morphogen are used to inhibit proliferation of smooth comprising the morphogen are used to inhibit proliferation of smooth comprising the morphogen are used to inhibit proliferation of smooth comprising the morphogen are used to inhibit proliferation of vascular composition composition comprising the morphogen are used to inhibit restular protect smooth muscle from cytotoxicity, reduce inflammation of vascular in smooth muscle trissue, treat a vascular proliferative disease, especially atherosclerosis or restenosis and to inhibit restenosis after angioplasty. All these treatments operate to preserve the cell phenotype by maintaining the normal balance of extracellular matrix collagen, or by maintaining the normal balance of extracellular matrix collagen.
Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Vectors expressing morphogens and related compositions
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                                   Query Match
Best Local S
Matches 20
386
                                    20;
                 \vdash
                                           Similarity
           INPETVPKFCCAPTQLNAIS
INPETVPKPCCAPTQLNAIS
                                    Conservative
                  100.0%; Pred. No. 100.0%; Pred. No. 100.0%; Mismatches
                                   Score 111; DB 2; Pred. No. 1.8e-06; ); Mismatches 0;
                 20
405
                                                     Length 431;
                                     Indels
                                    0
                                    Gaps
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AAY92587 standard; protein; 431 8

AAY92587;

10-AUG-2000 (first entry)

Morphogenic protein OP-1.

fusion n finger 2 s subdomain; subdomain; BMP; TGF-beta family; protein refolding; osteopathic; antibacterial; cytostatic.

sapiens

AAY92587
ID AAY925
XX AAY925
XX 10-AUG
XX 10-AUG
XX 60-A;
KW 60-A;
KW 60-A;
KW fusion
XX Homo E
XX Y
FH Key
FH CDS
FT CDS 49. .1344 /*tag= a /product= "OP-1" Location/Qualifiers

WO200020449-A2

13-APR-2000

07-OCT-1999; 99WO-US023372

07-OCT-1998; 16-AUG-1999; 98US-0103418P 99US-00375333

(STYC) STRYKER CORP

Oppermann H, Tai M, Mccartney J;

WPI; 2000-303743/26. N-PSDB; AAA09390.

WPI; 1999-358109/30 N-PSDB; AAX79684. Nakacka T, Miyazono

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Sampath KT;

A biologically active TGF-beta family member fusion protein competent refold, comprising a C-terminal linked TGF-beta family protein.

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RESULT 145
AAB09598
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             useful for the construction of BMP mutants. Novel proteins comprise biologically active TGP-beta family member fusion proteins comprise: refold under suitable refolding conditions. The fusion proteins comprise: (1) a TGP-beta family protein C-terminal seven cysteine domain comprise: (1) a TGP-beta family protein C-terminal seven cysteine domain. Comprising finger 1, finger 2 and heel subdomains; and (2) a heterologous leader sequence domain operatrively linked to the C-terminal domain. Truncations, heterodimers and mutants of these fusion proteins and comprise of purifying the heterodimers are also claimed. The TGP-beta family proteins can be used to induce the full cascade of morphogenic events which culminate in skeletal tissue formation, including cartilage and endochronal bone formation. They are useful in the binding of fibrin can fibronectin to the implanted matrix, chemotaxis of cells, cartilage formation, vascular invasion, bone formation, remodeling, and comperties such as solubility and stability, improved biological activity, including altered receptor binding and improved targeting
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Best Local :
           morphogenesis in e.g. tissue and connective the finger 2 domain.
                                                                                                                                                                                                                                                                                                                                                                                                                   Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental tissue; connective tissue; cartilage; vulnerary; mutant; mutein.
                             Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of
                                                                                                    WPI; 2000-303787/26
                                                                                                                                                                                                         07-OCT-1998;
16-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                    Synthetic
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l Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mutant protein R426D.
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                                                                                                                                      Tai M,
                                                                                                                                                                                                         98US-0103418P
99US-00374958
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                                                                                                                                      Mccartney
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OP-1 and its C-terminal seven cysteine domain is
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Pred. No. 1.8e-06;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to mutant TGF-beta (transforming growth factor-cells) superfamily members. These mutants compute one or more amino acid substitutions in the base region of the finger 2 subdomain, and a C terminal residue selected from Arg, 11e, Leu, Ser and Ala. In the finger C subdomain, basic residues (e.g., Arg, Lys), or residues containing an amide group (e.g., Gll, Asp), or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-cc amide group (e.g., Gll, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-cc glu, Asp) or residues containing an test superfamily proteins regulate developmental processes and include proteins (BMPs), growth/differentiation factors (GDPs) and inhibins. Specific examples of TGF-beta superfamily mutants encompassed by the cinvention are the finger 2 subdomain mutants of human osteogenic protein inducing tissue morphogenesis in bone, non-mineralised skeletal tissue, containing tissue, connective tissue, brain, liver and nerve tissue. The Cc dental tissue, connective tissue, brain, liver and nerve tissue and cc arboxymethylcellulose for regenerating bone, callagen, hydroxyapatite or carboxymethylcellulose for repear tissues e.g., interest of the sequence or carboxymethylcellulose for repear tissue or carboxymethylcellulose for repear tissue or carboxymethylcellulose for repear tissue or carboxymethylcell
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                                                                                                                                                                                                                                                                                              Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental tissue; connective tissue; cartilage; vulnerary.
                                                         07-OCT-1998;
16-AUG-1999;
                                                                                                                                                                                                                WO200020607-A2
                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                Human morphogenic protein OP-1, SEQ ID NO:39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAB09518 standard; protein; 431 AA
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                (STYC ) STRYKER CORP
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20; Conserv
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llarity 100.0%;
Conservative 0
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                                                         98US-0103418P.
99US-00374958.
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Pred. No. 1.8e-06;
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Oppermann H,

Tai M,

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The invention relates to mutant TGF-beta (transforming growth factor-CC beta) superfamily members. These mutants comprise one or more amino acid substitutions in the base region of the finger 2 subdomain, and a C-terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger CC subdomain, basic residues (e.g., Arg, Ile, Leu, Ser and Ala. In the finger CC subdomain, basic residues (e.g., Arg, Ile, Leu, Ser and Ala. In the finger CC subdomain, basic residues (e.g., Arg, Ile, Leu, Ser and Ala. In the finger CC glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-CC beta superfamily proteins regulate developmental processes and include croteins (BMPs), growth/differentiation factors (GDPs) and inhibins. CC specific examples of TGF-beta superfamily mutants encompassed by the invention are the finger 2 subdomain mutants of human osteogenic protein-1 (Op-1) (AaB09576-B09615). Mutant TGF-beta proteins are used for conducing tissue morphogenesis in bone, non-mineralised skeletal tissue, collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, cartilage and/or other mineralised skeletal or connective tissue, cartilage and/or other mineralised skeletal or connective tissue s.g., collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, cartilage and/or other mineralised skeletal or connective tissues e.g., collagent, tendon, muscle, fibrocartilage, joint capsule and confidence in a put ausole, fibrocartilage, joint capsule and confidence in a put angle of 6-9, increased solubility in aqueous solution confidence in a put range of 6-9, increased solubility in aqueous solution capsule and confidence in a put range of 6-9, increased solubility in aqueous solution capsule should improved stability and/or activity. The present sequence represents
Query Match
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                                                                                                                                                                                                                               Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental tissue; connective tissue; cartilage; vulnerary; mutant; mutein.
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                                                                                    WO200020607-A2
                                                                                                                                              Homo sapiens
Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                        mutant protein R421D.
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Pred. No. 1.8e-06;
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11-SEP-2000

Human OP-1 mutant protein R421S

Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability;

RESULT 148

AAB09607 standard; protein; 431 AA

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cc beta) superfamily members. These mutants comprise one or more amino acid cc substitutions in the base region of the finger 2 subdomain, and a C cerminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Lyg), or residues containing an cc amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., CC Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGP-cc beta superfamily proteins regulate developmental processes and include proteins such as the osteogenic proteins (OPs), bone morphogenetic cc proteins superfamily proteins regulate developmental processes and include cc invention are the finger 2 subdomain mutants of human osteogenic protein (OP-1) (AAB09578-B09615). Mutant TGF-beta proteins are used for cc inducing tissue morphogenesis in bone, non-mineralised skeletal tissue. The cc groteins can be used in conjunction with a biocompatible matrix e.g., cc collagen, hydroxyapatite or carboxymethylcelulose for regenerating bone, cc artilage and/or other mineralised skeletal or connective tissue. The op-1 mutants can be used to repair diseased or carboxymethylcelulose for regenerating bone, cc animalian tissue and to prevent or substantially inhibit cc inmune/inflammatory response-mediated tissue damage and scar tissue or superfamily members, the mutant proteins have improved in vitro refolding properties in a pH range of 6-9, increased solubility in aqueous solution and improved stability and/or activity. Sequences AAB09547-B09548 and cc specification, but is derived from the wild-type human OP-1 sequence cc given on page 138-139
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                                                                           Query Match
Best Local S
Matches 20
                                                                                                                                                       Sequence 431
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16-AUG-1999;
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  386
                                     1 INPETVPKPCCAPTQLNAIS 20
                                                                                                 Similarity
  INPETVPKPCCAPTQLNAIS
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                                                                              Conservative
                                                                                                                                                          AA;
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99US-00374958
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                                                                           100.0%; Score 111; DB 3; 100.0%; Pred. No. 1.8e-06; tive 0; Mismatches 0;
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                                                                                                                    Length 431;
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18-10-018-910-11.00cc21.1dg

THE OCT 26 09:1/:05 2004

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The invention relates to mutant TGF-beta (transforming growth factor-
CC beta) superfamily members. These mutants comprise one or more amino acid
CC substitutions in the base region of the finger 2 subdomain, and a c-
CC terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger
CC subdomain, basic residues (e.g., Arg, Lys), or residues containing an
CC amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g.,
CC Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-
beta superfamily proteins regulate developmental processes and include
CC proteins (BMPs), growth/differentiation factors (GDPs) and inhibins.
CC specific examples of TGF-beta superfamily mutants encompassed by the
CC inducing tissue morphogenesis in bone, non-mineralised skeletal tissue,
CC inducing tissue morphogenesis in bone, non-mineralised skeletal tissue,
CC dental tissue, connective tissue, brain, liver and nerve tissue. The
CC collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone,
CC collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone,
CC damaged mammalian tissue and to prevent or substantially inhibit
CC immune/inflammatory response-mediated tissue damage and scar tissue
CC damaged mammalian tissue and to prevent or substantially inhibit
CC immune/inflammatory an injury. Compared to the wild-type TGF-beta
CC superfamily members, the mutant proteins have improved in vitro refolding
CC and improved stability and/or activity. Sequences AAB09547-B09548 and
CC and improved stability and/or activity. Sequences AAB09547-B09548 and
CC specification, but is derived from the wild-type human OP-1 sequence
                                                                                                                              Matches
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16-AUG-1999;
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                                                                                                                                                                                                                                                             Sequence 431 AA;
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                                                                                                                                                                 Local Similarity
386
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                                                               INPETVPKPCCAPTQLNAIS 20
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INPETVEKECCAPTQLNAIS 405
                                                                                                                                  Conservative
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99US-00374958.
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                                                                                                                              0;
                                                                                                                                                              Score 111; DB 3;
Pred. No. 1.8e-06;
                                                                                                                                  Mismatches
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AAB09615 standard; protein; 431

Query Match Best Local Similarity

100.0%;

No. 1

DB 3;

Length 431;

Sequence

431 ΑA,

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CC The invention relates to mutant TGF-beta (transforming growth factor-
CC beta) superfamily members. These mutants comprise one or more amino acid
cc substitutions in the base region of the finger 2 subdomain, and a C-
CC terminal residue selected from Arg, IIe, Leu, Ser and Ala. In the finger
CC subdomain, basic residues (e.g., Arg, Lys), or residues containing an
CC glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-
CC beta superfamily proteins regulate developmental processes and include
CC proteins such as the osteogenic proteins (OPs), bone morphogenetic
CC specific examples of TGF-beta superfamily mutants encompassed by the
CC invention are the finger 2 subdomain mutants of human osteogenic protein-
CC inducing tissue morphogenesis in bone, non-mineralised skeletal for
CC cartilage and/or other mineralised skeletal or connective tissue,
CC cartilage and/or other mineralised skeletal or connective tissue.
CC cartilage and/or other mineralised skeletal or connective tissue e.g.,
CC collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone,
CC cartilage and/or other mineralised skeletal or connective tissues e.g.,
CC collagen, tendon, muscle, fibropartilage, joint capsule and
CC inmune/inflammatory response-mediated tissue damage and scar tissue
CC superfamily members, the mutant or other wild-type TGF-beta
CC proterins in a pH range of 6-9, increased solubility in aqueous solution
CC protein-1 (OP-1). Note: The present sequence is not shown in the
CC given on marcal 18a 139
Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.
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Synthetic.
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16-AUG-1999;
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99US-00374958.
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The invention relates to mutant TGF-beta (transforming growth factor-CC beta) superfamily members. These mutants comprise one or more amino acid substitutions in the base region of the finger 2 subdomain, and a C-c terminal residue selected from Arg, Ile, Leu, Ser and Ala, In the finger 2 subdomain, basic residues (e.g., Arg, Lys), or residues containing an amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-beta superfamily proteins regulate developmental processes and include proteins such as the osteogenic proteins (OPS), bone morphogenetic compositions (BMPS), growth/differentiation factors (GDFs) and inhibins. CS Specific examples of TGF-beta superfamily mutants encompassed by the cinvention are the finger 2 subdomain mutants of human osteogenic protein-composition tissue morphogenesis in bone, non-mineralised skeletal tissue, and the composition tissue, for the collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, CC cartilage and/or other mineralised skeletal or connective tissues e.g., CC cartilage and/or other mineralised skeletal or connective tissues e.g., CC intervertebral discs. The OP-1 mutants of used to repair diseased or cambers, the mutants proteins have improved in vitro refolding comporties in a pH range of 6-9, increased solubility in aqueous solution comporties in a pH range of 6-9, increased solubility in aqueous solution
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16-AUG-1999;
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solubility;
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2 subdomain; basic region; protein refolding; stability;
lity; tissue morphogenesis; regeneration; bone; dental ti
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AC AAB095
AC AAB095
AC OAB096
AC OAB096
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16-AUG-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-OCT-1999;
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and improved stability and/or activity. Sequences AAB09547-B09548 and AAB09576-B09615 represent mutant or chimeric forms of human osteogen: protein-1 (OP-1). Note: The present sequence is not shown in the specification, but is derived from the wild-type human OP-1 sequence given on page 138-139
                                                                                             Similarity
INPETVPKPCCAPTQLNAIS
                                    INPETVPKPCCAPTQLNAIS
                                                                             Conservative
                                                                                             100.0%;
                                                                             0
                                                                           Score 111; DB 3;
Pred. No. 1.8e-06;
; Mismatches 0;
  405
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                                                                                                              Length
                                                                             Indels
                                                                                                                    431;
                                                                             0
                                                                                                                                                                                                                                                    osteogenic
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Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental ti
connective tissue; cartilage; vulnerary; mutant; mutein
                                                                                                                                                                                            Human OP-1 mutant
                                                                                                                                                                                                                                                                                                                                                                                    standard; protein; 431
                                                                                                                                                                                                                                                            (first
                                                                                                                                                                                        protein N422D
                                                                                                                                                                                                                                                            entry
                                         tissue;
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Tai M, Mccartney

2000-303787/26

Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.

Claim 22; Page; 162pp; English.

The invention relates to mutant TGF-beta (transforming growth factor-CC beta) superfamily members. These mutants comprise one or more amino acid substitutions in the base region of the finger 2 subdomain, and a C-CC terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Lys), or residues containing an CC amide group (e.g., Gln, Asn). The finger 2 subdomain, basic residues (e.g., Arg, Lys), or residues containing an CC amide group (e.g., Gln, Asn) are substituted with acidic residues (e.g., CC Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-ce beta superfamily proteins regulate developmental processes and include proteins such as the osteogenic proteins (OPs), bone morphogenetic proteins (BNPs), growth/differentiation factors (GDFs) and inhibins. CC proteins (BNPs), growth/differentiation factors (GDFs) and inhibins. CC invention are the finger 2 subdomain mutants of human osteogenic protein-cc invention are the finger 2 subdomain morphogenesis in bone, non-mineralised skeletal tissue, CC dental tissue, connective tissue, brain, liver and nerve tissue. The

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RESULT 152
AAB09609
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                                                                                                                                          Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental tissue; connective tissue; cartilage; vulnerary; mutant; mutein.
The invention relates to mutant TGF-beta (transforming growth factorbeta) superfamily members. These mutants comprise one or more amino acid substitutions in the base region of the finger 2 subdomain, and a Cterminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Lys), or residues containing an
                                                                                                        Claim 23; Page; 162pp; English.
                                                                                                                                                                                                                                      WPI; 2000-303787/26.
                                                                                                                                                                                                                                                                                                                                              07-OCT-1998;
16-AUG-1999;
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                                                                                                                                                                                                                                                                        Oppermann H,
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99US-00374958
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Pred. No. 1.8e-06;
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Cc beta superfamily proteins regulate developmental processes and include
Cc proteins such as the osteogenic proteins (OPs), bone morphogenetic
Cc proteins (BMPs), growth/differentiation factors (GDFs) and inhibins.
Cs Specific examples of TGF-beta superfamily mutants encompassed by the
Cc invention are the finger 2 subdomain mutants of human osteogenic protein-
Cc inducing tissue morphogenesis in bone, non-mineralised skeletal tissue,
Cc dental tissue, connective tissue, brain, liver and nerve tissue. The
Cc collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone,
Cc cartilage and/or other mineralised skeletal or connective tissue e.g.,
Cc cligament, tendon, muscle, fibrocartilage, joint capsule and
Cc intervertebral discs. The Op-1 mutants can be used to repair diseased or
Cd damaged mammalian tissue and to prevent or substantially inhibit
Cc immune/inflammatory response-mediated tissue damage and scar tissue
Cc superfies in a pH range of 6-9, increased solubility in aqueous solution
Cc and improved stability and/or activity. Sequences AABO9576-B09615 represent mutant or chimeric forms of human osteogenic
Cc protein-1 (Op-1). Note: The present sequence is not shown in the
Cc specification, but is derived from the wild-type human OP-1 sequence
Cc given on page 138-139
  RESULT 153
AAB09579
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                               Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental tissue; connective tissue; cartilage; vulnerary; mutant; mutein.
                                                                                                                                                                    07-OCT-1998;
16-AUG-1999;
Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental
                                                                                                                                                                                                                              07-OCT-1999;
                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human OP-1 mutant protein H2247.
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                                                        WPI; 2000-303787/26
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20; Conserv
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                                                                                            Tai M,
                                                                                                                                                                    98US-0103418P.
99US-00374958.
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                                                                                              Mccartney
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The invention relates to mutant TGF-beta (transforming growth factor-CC beta) superfamily members. These mutants comprise one or more amino acid contents tuttions in the base region of the finger 2 subdomain, and a C-CC terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger CC subdomain, basic residues (e.g., Arg, Lys), or residues containing an camide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., CC Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-CC beta superfamily procesins regulate developmental processes and include proteins (SMPs), growth/differentiation factors (GDPs) and inhibits. CC Specific examples of TGF-beta superfamily mutants encompassed by the criminal residues (SMPs), some morphogenetic proteins (GPs), bone morphogenetic proteins (GPs), bone morphogenetic crimucal tissue, connective tissue, brain, liver and nerve tissue. The CC dental tissue, connective tissue, brain, liver and nerve tissue and the used in conjunction with a biocompatible matrix e.g., collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, collagen, muscle, fibrocartilage, joint capsule and intervertabral discs. The Op-1 mutants can be used to repair diseased or damaged mammalian tissue and to prevent or substantially inhibit commune/inflammatory response-mediated tissue damage and scar tissue formation following an injury. Compared to the wild-type TGF-beta consectives the present mutant proteins have improved in vitro refolding and improved stability and/or activity. Sequences AAB09547-B09548 and convention and improved stability and/or activity. Sequence is not shown in the convention of human Op-1 sequence
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                             Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental ti connective tissue; cartilage; vulnerary; mutant; mutein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human OP-1 mutant protein N422S.
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07-OCT-1999;
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                                                                              13-APR-2000
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    99WO-US023371.
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1.0%; Pred. No. 1.8e-06;
0; Mismatches 0;
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KW transf
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KW solubi
KW connec
XX Connec

OP-1

mutant

protein R421T.

AAB09613;

11-SEP-2000

(first entry

AAB09613 standard; protein; 431

Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental ti connective tissue; cartilage; vulnerary; mutant; mutein.

tissue

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386

INPETVPKPCCAPTQLNAIS 405 INPETVPKPCCAPTQLNAIS

ب 20;

Query Match Best Local s Matches 20

Similarity

100.0%;

Conservative

0

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Score 111; DB 3; Pred. No. 1.8e-06; 0; Mismatches 0;

Length 431; Indels

0

Gaps

0

Sequence

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07-OCT-1998;

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The invention relates to mutant TGF-beta (transforming growth factor-cc beta) superfamily members. These mutants comprise one or more amino acid substitutions in the base region of the finger 2 subdomain, and a C-ct terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Ile, Ser and Ala. In the finger C amide group (e.g., Gln, Ash), are substituted with acidic residues containing an amide group (e.g., Gln, Ash), are substituted with acidic residues containing a hydroxyl group (e.g., Ser, Thr). TGF-cere subdomain, superfamily proteins regulate developmental processes and include proteins such as the osteogenic proteins (OPs), bone morphogenetic groteins (superfamily proteins regulate developmental processes and include contains such as the osteogenic proteins (OPs), bone morphogenetic groteins (superfamily mutants encompassed by the ciny of the finger 2 subdomain mutants of human osteogenic protein-(C invention are the finger 2 subdomain mutants of human osteogenic protein-(C inducing tissue morphogenesis in bone, non-mineralised skeletal tissue, content tissue, connective tissue, proteins are used for carboxymethyleshlukses for regenerating bone, collagen, hydroxyapatite or carboxymethyleshlukse for regenerating bone, collagen, hydroxyapatite or carboxymethyleshlukse for regenerating bone, collagen, hydroxyapatite or carboxymethyleshlukses and diseased or damage amd/or other mineralised skeletal or connective tissues e.g., contained tissue and to prevent or substantially inhibit commune/inflammatory response-mediated tissue damage and scar tissue formation following an injury. Compared to the wild-type TGF-beta consideration, but is derived from the wild-type human osteogenic properties in a pH range of 6-9, increased solubility in aqueous solution and improved stability and/or activity. Sequences Aab09547-B09548 and conspective tissue in the substitution of the wild-type human openic groteins. The present mutant or chimeric forms of human osteogenic giv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.
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                                                specification, but is given on page 138-139
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                                                  AAB09603 standard; protein; 431
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The invention relates to mutant TGF-beta (transforming growth factor-cc beta) superfamily members. These mutants comprise one or more amino acid substitutions in the base region of the finger 2 subdomain, and a C-c terminal residue selected from Arg, 1le, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Lys), or residues containing an amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., Arg, Lys), or residues containing an include grother of the superfamily proteins regulate developmental processes and include proteins such as the osteogenic proteins (OPs), bone morphogenetic groteins (BMPs), growth/differentiation factors (GDFs) and inhibins. Genetic examples of TGF-beta superfamily mutants encompassed by the cinducing tissue morphogenesis in bone, non-mineralised skeletal tissue, confective tissue, brain, liver and nerve tissue. The CC proteins can be used in conjunction with a biocompatible matrix e.g., collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, cc cartilage and/or other mineralised skeletal or connective tissue, and intervertebral discs. The OP-1 mutants can be used to repair diseased or damaged mammalian tissue and to prevent or substantially inhibit confinency response-mediated tissue damage and scar tissue formation following an injury. Compared to the wild-type TGF-beta superfamily members, the mutant proteins have improved in vitro refolding properties in a pH range of 6-9, increased solubility in aqueous solution and improved stability and/or activity. Sequences AAB09547-B09548 and convertive form on nare 118c. 130
                                                                           Matches
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16-AUG-1999;
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1 Similarity
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Pred. No. 1.8e-06;
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The invention relates to mutant TGF-beta (transforming growth factor-CC beta) superfamily members. These mutants comprise one or more amino acid C substitutions in the base region of the finger 2 subdomain, and a C-CC terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Lys), or residues containing an CC amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., CGlu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-CC beta superfamily proteins regulate developmental processes and include proteins (super), growth/differentiation factors (GDFs) and inhibins.

CC groteins (BMPs), growth/differentiation factors (GDFs) and inhibins.

CC contains (BMPs), growth/differentiation factors (GDFs) and inhibins.

CC finducing tissue morphogenesis in bone, non-mineralised skeletal tissue, contains tasue morphogenesis in bone, non-mineralised skeletal tissue. The CC proteins can be used in conjunction with a biocompatible matrix e.g., collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, cartilage and/or other mineralised skeletal or connective tissues e.g., collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, cartilage and/or other mineralised skeletal or connective tissues e.g., collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, cartilage and/or other mineralised skeletal or connective tissues e.g., collagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, cartilage and/or other mineralised skeletal or connective tissues e.g., collagen manalian tissue and to prevent or substantially inhibit immune/inflammatory response-mediated tissue damage and scar tissue formation following an injury. Compared to the wild-type TGF-beta and compared to the wild-type TGF-beta and the protein and the protein have improved in vitro refolding proteins of hydroxyapatics Ababosat7-Bos548 and compared to the wild-type TGF-beta and compared to the wild-type TGF-beta and compa
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16-AUG-1999;
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The invention relates to mutant TGF-beta (transforming growth factorCC beta) superfamily members. These mutants comprise one or more amino acid
consistitutions in the base region of the finger 2 subdomain, and a CCC terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger
CC subdomain, basic residues (e.g., Arg, Lys), or residues containing an
CC amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g.,
CC Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGFcc beta superfamily proteins regulate developmental processes and include
contains (such as the osteogenic proteins (OPs), bone morphogenetic
CC proteins (supes), growth/differentiation factors (GDFs) and inhibins.
CC Specific examples of TGF-beta superfamily mutants encompassed by the
invention are the finger 2 subdomain mutants of human osteogenic proteinCC inducing tissue morphogenesis in bone, non-mineralised skeletal tissue,
CC dental tissue, connective tissue, brain, liver and nerve tissue. The
CC proteins can be used in conjunction with a biocompatible matrix e.g.,
CC cartilage and/or other mineralised skeletal or connective tissues e.g.,

Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.

Disclosure; Page; 162pp; English.

WPI; 2000-303787/26.

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ARBOULT 158
AAB09583
AID B0958
AXX AAB095
XXX AAB095
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KW Connec
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16-AUG-1999;
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Pred. No. 1.8e-06;
Mismatches 0;
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RESULT 159
AAB09602
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The invention relates to mutant TGF-beta (transforming growth factorbeta) superfamily members. These mutants comprise one or more amino acid substitutions in the base region of the finger 2 subdomain, and C-terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg, Lys), or residues containing an amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., Gln, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-beta superfamily proteins regulate developmental processes and include
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ligament, tendon, muscle, fibrocartilage, joint capsule and intervertebral discs. The OP-1 mutants can be used to repair diseased or damaged mammalian tissue and to prevent or substantially inhibit immune/inflammatory response-mediated tissue damage and scar tissue formation following an injury. Compared to the wild-type TGF-beta superfamily members, the mutant proteins have improved in vitro refolding properties in a pH range of 6-9, increased solubility in aqueous solution and improved stability and/or activity. Sequences AAB09547-B09548 and AAB09576-B09515 represent mutant or chimeric forms of human osteogenic protein-1 (OP-1). Note: The present sequence is not shown in the specification, but is derived from the wild-type human OP-1 sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Osteogenic protein-1; OP-1; human; TGF-beta superfamily; transforming growth factor-beta; developmental regulation; finger 2 subdomain; basic region; protein refolding; stability; solubility; tissue morphogenesis; regeneration; bone; dental tissue; connective tissue; cartilage; vulnerary; mutant; mutein.
                                                                                                                                                                                                Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.
                                                                                                                                                                 Claim 22; Page; 162pp; English.
                                                                                                                                                                                                                                                                                              WPI; 2000-303787/26.
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16-AUG-1999;
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Pred. No. 1.8e-06;
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RESULT 160
AAB09614
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Matches 20
Liansforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution of the finger 2 domain.
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16-AUG-1999;
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Claim 23; Page; 162pp; English

invention relates to mutant TGF-beta (transforming growth factor-

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Matches
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                                                                    07-OCT-1998;
16-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         connective tissue; cartilage; vulnerary; mutant;
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given on page 138-139
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(STYC) STRYKER CORP

ARESULT 162
AAY92442
ID AAY9244
XX AAY924
XX IO-AUG
XX IO-AUG
XX USteog
XW Chondr
XX Chondr

Human osteogenic protein 1 (OP-1).

10-AUG-2000 AAY92442

(first entry)

AAY92442 standard; protein; 431 AA

Osteogenic protein; OPX; seven-cysteine domain; osteogenic; chondrogenic. osteopathic; implant; transplantation.

Homo sapiens

Domain

Location/Qualifiers
330. .431
/label= C-terminal_7-cysteine_domain

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386

INPETVPKPCCAPTQLNAIS 405

1 INPETVPKPCCAPTQLNAIS 20

Matches Query Match

20;

Conservative

0;

Local

Similarity

100.0%;

Score 111; DB 3; Pred. No. 1.8e-06;); Mismatches 0;

Length 431;

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Gaps

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Sequence

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The invention relates to mutant TGF-beta (transforming growth factor-CC beta) superfamily members. These mutants comprise one or more amino acid contential in the base region of the finger 2 subdomain, and a C-C-CC terminal residue selected from Arg, Ile, Leu, Ser and Ala. In the finger 2 subdomain, basic residues (e.g., Arg., Lys), or residues containing an CC amide group (e.g., Gln, Asn), are substituted with acidic residues (e.g., CC Glu, Asp) or residues containing a hydroxyl group (e.g., Ser, Thr). TGF-CC beta superfamily proteins regulate developmental processes and include groteins (BMPs), growth/differentiation factors (GDPs) and inhibins. Specific examples of TGF-beta superfamily mutants encompassed by the CC proteins (BMPs), growth/differentiation factors (GDPs) and inhibins. CC invention are the finger 2 subdomain mutants of human osteogenic protein-CC (OP-1) (AB30976-B09615). Mutant TGF-beta proceins are used for inducing tissue morphogenesis in bone, non-mineralised skeletal tissue, CC dental tissue, connective tissue, brain, liver and nerve tissue. The CC cartilage and/or other mineralised skeletal or connective tissues e.g., CC cliagen, hydroxyapatite or carboxymethylcellulose for regenerating bone, CC cartilage and/or other mineralised skeletal or connective tissues e.g., CC damaged mammalian tissue and to prevent or substantially inhibit commanded to repair diseased or commune/inflammatory response-mediated tissue damage and scar tissue formation following an injury. Compared to the wild-type TGF-beta consideration, but is derived from the wild-type human osteogenic constantial (DP-1). Note: The present sequence is not shown in the constantial of the constant or chimeric forms of human osteogenic constantial tissue and constantial or connective tissues constantial the constantial of the constantial of the constantial or connective tissues constantial or connective tissue damage and scar tissue constantial constantial constantial constantial constantial constantial constantial constantial consta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Transforming growth factor-beta superfamily member mutant induces tissue morphogenesis in e.g. bone, non-mineralized skeletal tissue, dental tissue and connective tissue and comprises a substitution in a region of the finger 2 domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 22; Page; 162pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-303787/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oppermann H,
                                                      specification, but is given on page 138-139
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tai M,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 163
AAY82158
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The specification concerns a novel method for repairing a defect in a nor articular cartilage tissue or a ligament of a mammal, which comprises providing an osteogenic protein in a biocompatible, bioresorbable carrier to the defect locus to induce the formation of functional replacement cartilage. The methods and implants, promote chondrogenesis and are useful for repairing or correcting a defect in a non-articular cartilage tissue or a ligament of a mammal, e.g. cleft larynx, oedema of the glottis, ulceration of the larynx caused by sphilis, tuberculosis or malignancy, defects resulting from mechanical trauma to the larynx or trachea (including tracheotomy and laryngotomy), laryngeal cancer, and defects of the ear, nose, ribs, invertebral discs, and interarticular
WPI; 2000-222942/19
                                                      Sampath KT,
                                                                                                                                                                  03-JUN-1994;
                                                                                                                                                                                                                            02-JUN-1995;
                                                                                                                                                                                                                                                                                                                                           US6027743-A.
                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; osteogenic protein; OP1; OPX; matrix; skeletal joint; bone; articular cartilage; replacement body part.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human osteogenic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel methods for repairing a defect in mammalian nonarticular cartilage tissue or ligaments using an osteogenic protein in a biocompatible, bioresorbable carrier.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-PSDB; AAA09361.
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                                                                                                                                                                                                                                                                                     22-FEB-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Vukicevic S,
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                                                                                                               (STYC ) STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (STYC ) STRYKER CORP
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ilarity 100.0%;
Conservative 0
                                                   Rueger DC,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0103161P
                                                                                                                                                                  94US-00253398
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                                                         Khouri RK;
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Pred. No. 1.8e-06;
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RESULT 164
AAY57229
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes devices (I) and methods (II) for the commanufacture in vivo of autogenous replacement body parts (especially constituent in vivo of distinct tissues. (I) and (II) care used for the manufacture in vivo of autogenous replacement body parts (especially skeletal joints) comprising a number of distinct tissues. The cuse of (I) results in the formation of mechanically and functionally convising a number of distinct tissues. The cuse of (I) results in the formation of mechanically and functionally cuse of (I) and (II) convising a number of distinct tissues. The cuse of the formation of a functional body part. In particular, the multi-tissue creplacement part whether produced in situ at the site of intended use or regardless of the conditions present at the site of intended use or regardless of the conditions present at the recipient site. The devices are capable of being precisely contoured and shaped to exactly match any defect however complex the organ or organ shape it is used to replace. Confects have minimal donor site morbidity. The present sequence conception of the present invention OP1, which is used in the exactly match of the present invention.
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Best Local
                                                                                                        11-MAR-1991;
30-AUG-1991;
30-AUG-1991;
28-AUG-1992;
20-JUL-1994;
26-MAY-1995;
                             Smart JE,
Cohen CM,
                                                                                                                                                                                                                                                                                                                                          Morphogen; bone formation; modulation; endochondral; OP-1; OP-2; DPP; transforming growth factor; TGF-beta; osteogenic protein; BMP2; Vgr-1; GDF-1; 60A protein; screening assay; therapeutic; cell death.
WPI; 2000-038265/03
                                                                                                                                                                                                                                                    30-NOV-1999
                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                           Human osteogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                          06-MAR-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY57229 standard; protein; 431 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Col 27-30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       skeletal joints.
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                                                                                                                                                                                                                    15-AUG-1997;
                                                                                                                                                                                                                                                                                  US5994131-A.
                                                                            (CREA-) CREATIVE BIOMOLECULES INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      manufacture of autologous replacement body parts for replacing
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                            Oppermann H,
Ozkaynak E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                        91US-00667274.
91US-00752764.
91US-00752861.
92US-0938021.
94US-00278729.
95US-00451953.
                                                                                                                                                                                                                      97US-00912088
                                                                                                                                                                                                                                                                                                                                                                                                           protein (hOP-1).
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                                                Kuberasampath T,
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Pred. No. 1.8e-06;
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                                                Rueger
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                                              Pang RHL;
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N-PSDB; AAZ39477

Screening

g assay useful for identifying compounds which can act expression of a morphogen in a mammalian cell.

cc epithelial cells identified in an assay for bone formation. The method uses a protein that induces endochondral bone formation. The method comorphogenic protein which is a member of the transforming growth factor (TGR-beta) superfamily. Other morphogens useful in the invention are consteogenic proteins (Op-1, Op-2 and CBMP2) and related proteins such as DPP, Vgr-1, GDP-1 and the 60A protein. The method is used as acreening assay for identifying compounds which modulate the level of expression of a morphogen. The method allows the determination of substances useful in therapeutic treatments to modulate (stimulate or depress) morphogen expression and/or secretion in disease treatment. Compounds can be expression and/or secretion in disease treatment. Compounds can be coreened for their ability to modulate the effective systemic or local concentration of a morphogen. Compounds which can be screened include chemicals, biological response molecules such as lymphokines, cytokines, or or assay has few steps and is easy to carry out producing results or quickly. Drugs which result in cell death are easy to identify

The invention provides a method for altering expression of a morphogon a mammalian cell with a compound that modulates morphogen expression

a morphogen in

Disclosure; Col 45-40; 48pp;

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         PRIX REPRESENTATION OF THE PRIX REPRESENTATION O
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AAB02784
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tumour growth factor beta; TGF-beta; morphogenic protein; BMP; OP; bone morphogenic protein; osteogenic protein; mutant; modified; finger 2 sub-domain; finger 1 domain; heel domain; chimeric protein; osteogenic; proliferative; antiinflammatory; tissue morphogenesis; tissue repair; regeneration; proliferation; differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human morphogenic protein OP-1 protein SEQ ID NO:39
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16-AUG-1999;
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Novel TGF-beta superfamily mutant chimeric protein, useful for inducing tissue morphogenesis in e.g. bone, comprises a dimer consisting of one
                                                                                                                                                                                                                   Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-APR-2000.
                                                                                                                                                                                                                                                                                                          (STYC ) STRYKER CORP
                                                                                                                                     2000-303776/26
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                                                                                                                                                                                                                   Tai M,
                                                                                                                                                                                                                                                                                                                                                                                             98US-0103418P.
99US-00374936.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US023370.
                                                                                                                                                                                                                            Mccartney
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The present sequence is the human osteogenic protein 1 (OP-1) (also known as BMP-7). OP-1 is a bone morphogen which induces cellular differentiation and thus prevents cell proliferation. Morphogens can also be used to treat cancer, as it has been shown that they can inhibit tumour cell proliferation as well. The types of cancer include adrenal, anus, bladder, bone, brain, breast, cervix, colon, corpus, endocrine,

Claim 1; Page 69-71; 75pp; English.

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RESULT 166
AAY973
AAY973
XX
AAY973
AC AAY973
AC AAY973
AC AAY973
XX
O5-SEP
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Human
XX
Homo s
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PT Cancer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; osteogenic protein; OP-1; morphogen; cell differentiation; cell growth inhibition; BMP-7.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               monomer containing domains from two family members
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200029012-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human osteogenic protein OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-SEP-2000
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                                                                                                                                                                                                                                                                                                               Administration of a morphogen to treat and alleviate the symptoms cancer, such as abnormal cell morphology, abnormal enzyme levels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sampath KT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-NOV-1999;
                                                                                                                                                                                                                                                                                    opportunistic infection and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (CREA-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
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llarity 100.0%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cohen CM,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-00191239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US026636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rueger DC
                                                                                                                                                                                                                                                                                 pain.
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Pred. No. 1.8e-06;
0; Mismatches 0;
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Query Match Best Local S Matches 20

Local Similarity les 20; Conserv

ilarity 100.0%; Score 111; DB 3; Conservative 0; Mismatches

Length 431; Indels

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Gaps

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Sequence 431

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RESULT 167
AAB08841
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local .
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The present sequence represents a human osteogenic protein 1 (OP1). The protein is used in devices of the invention. The specification describes devices for repairing a skeletal joint defect in mammals. The device comprises exogenous osteogenic protein deposited on the surface of a biocompatible, biodegradable matrix. The matrix comprises distinct tissues derived from a proximal or distal hemi-joint. The device serves as a template to form an in vivo functional skeletal joint replacement which is long term mechanically and functionally viable. The exogenous
                                                                                                                                                                                               Device for repairing skeletal joint defect in mammals comprises exogenous osteogenic protein deposited on the surface of a matrix comprising plural distinct tissues derived from proximal or distal hemi-joint.
                                                                                                                                                             Disclosure; Col 27-30; 21pp; English
                                                                                                                                                                                                                                                                           N-PSDB; AAA75039.
                                                                                                                                                                                                                                                                                                                               Sampath KT,
                                                                                                                                                                                                                                                                                                                                                                                                   03-JUN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US6110482-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; osteogenic protein \mathbf{1}_i OP1; skeletal joint defect; tissue repair; articular cartilage defect.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Amino acid sequence of a human osteogenic protein 1 (OP1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB08841 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     02-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                                 STRYKER CORP.
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                                                                                                                                                                                                                                                                                                                             Rueger DC,
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                                                                                                                                                                                                                                                                                                                                                                                                     94US-00253398
                                                                                                                                                                                                                                                                                                                                                                                                                                     95US-00459129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein; 431
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                                                                                                                                                                                                                                                                                                                               Khouri RK;
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Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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ARBSO233
ID ARBSO22
XX ARBSO22
XX ARBSO22
XX LID 13-MAR
XX Human;
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PN US6153
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ស្ត្រីស្ត្រីស្ត្រីស្ត្រីស្ត្រី
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-AUG-1992;
15-SEP-1992;
15-SEP-1992;
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                         New compositions containing a morphogenically active fragment of OP-3, useful for inducing the formation of replacement tissue at a tissue lo in a mammal, especially useful for replacing diseased or damaged tissuin a mammal.
                                                                                                                                                             WPI; 2001-069971/08.
N-PSDB; AAC89688.
                                                                                                                                                                                                                                            Ozkaynak E,
Oppermann H;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; tissue morphogenesis induction; OP-3; cell different: redifferentiation; skin disease; blood disorder; transplant
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30-AUG-1991;
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                                                                                                                                                                                                                                                                                                                           (STYC ) STRYKER CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   L6-SEP-1992
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92US-00945286.
92US-00946235.
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97US-00901200
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92US-00971009
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91US-00752857
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Pred. No. 1.8e-06;
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RESULT 169
AAB3764
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AC AAB376
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KW Proges
XX WO2000
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Best Local :
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                                                                      The present invention relates to a morphogen which is a luteinisation inhibitor. The morphogen comprises the C-terminal seven-cysteine skeleton of human osteogenic protein-1 (OP-1). The present sequence is the full-length OP-1 protein. The morphogen comprises amino acids 330-431 of the present sequence. The morphogen is useful for increasing fertility, alleviating symptoms of menopause, delaying onset of menopause, and attenuating progesterone synthesis and inducing or increasing oestrogen synthesis in atretic or healthy ovarian follicles of a subject. Compounds which interfers with the binding of the morphogen to its receptor are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, OP-1; contraceptive; antiinfertility; gynaecological; morphogen; luteinisation inhibitor; osteogenic protein-1; menopause; progesterone synthesis; oestrogen synthesis.
                                                                                                                                                                                                                                                                                                                                                                          Use of morphogen, a luteinization inhibitor, for increasing fertility, alleviating symptoms of menopause, delaying onset of menopause and for contraception.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-APR-1999;
27-APR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 431
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                                                                                                                                                                                                                                                                                                                              Claim 1; Page 62-64; 74pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (CREA-) CREATIVE BIOMOLECULES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001-024771/03.
DB; AAC83806.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INPETVEKECCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Col 49-52; 46pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99US-0131721P.
2000US-00561171.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 111; DB 4; 100.0%; Pred. No. 1.8e-06; o; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    431 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            English
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Sequence

431

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Query Match Best Local Similarity

100.0%;

Score Pred.

111; DB 4; No. 1.8e-06;

Length 431

Sequence 431 AA;

contraception

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AAU09117
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                       The invention relates to inducing angiogenesis in a mammal by administering a morphogenic protein, which is not bone morphogenic protein (BMP)-2 or GDP-5 improving the angiogenic inductive activity of the morphogenic protein in a mammal by co-administering a morphogenic protein stimulatory factor (MPSF). The method is useful for inducing angiogenesis in a mammal required in physiological processes and treating pathophysiologies such as reproduction, wound healing, organ pathophysiologies such as reproduction, wound healing, organ transplantation, bone repair, ischaemic heart disease, ischaemic peripheral vascular disease, tumours, rheumatoid atthritis, diabetic retinopathy, myocardial infarction, inflammatory diseases such as ulcers. The present sequence represents human osteogenic protein, CP-1 (also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; morphogenic protein; OP-1; osteogenic protein-1; vulnerary; vasotropic; antianginal; immunosuppressive; osteopathic; cardiant; angiogenesis; reproduction, wound healing; organ transplantation; bone repair; ischaemic heart disease; tumour; rheumatoid arthritts; diabetic retinopathy; mycardial infarction; inflammatory disease; ulcer; ischaemic peripheral vascular disease; BMP7; bone morphogenic protein; morphogenic protein stimulatory factor; MPSF.
                                                                                                                                                                                                                                                                                                                                                                                                              Ripamonti U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAR-2000; 2000US-00540466.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human morphogenic protein OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAU09117 standard; protein; 431 AA
                                                                                                                                                                                                                                                                                                                                                               N-PSDB; AAS15216.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-MAR-2001; 2001WO-US009451.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200174379-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Domain
                                                                                                                                                                                                                                                             Claim 6; Page 77-77; 81pp; English.
                               known as bone morphogenic protein method of the invention
                                                                                                                                                                                                                                                                                          Inducing angiogenesis in a mammal required in physiological processes in treating pathophysiologies such as reproduction, wound healing, ischemic heart disease, by administering a morphogenic protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                               (STYC )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                386
                                                                                                                                                                                                                                                                                                                                                                                2001-656972/75
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20;
                                                                                                                                                                                                                                                                                                                                                                                                                                               STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                Ramoshebi LN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers 330. .431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /label= C_terminal_seven_cysteine_domain
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 111; DB 4;
Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                               7), a
                                                morphogenic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   431;
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RESULT 171
AABO0386
ID AABO0386
XX AABO03
AC Human;
KW Human;
KW bone m Key inflam
KW thromk
KW thromk
KW thromk
KW bone m Yheume
AX Inflam
CO SHOMO (STYC)
PT Domain
FT Domain

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                                                                                       The present sequence is human osteogenic protein 1 (hOP-1) also referred CC as bone morphogenic protein 7 (BMP-7). The invention relates to a method CC for improving the tissue inductive capability of a morphogenic protein in CC anammal by administering the morphogenic protein, a hormone, and a C soluble receptor of the hormone, where the morphogenic protein's CC capability to induce tissue formation when accessible to the progenitor CC capability of improving the tissue inductive capability of a CC morphogenic protein at a target locus e.g. a jaw bone defect such as a CC morphogenic protein at a target locus e.g. a jaw bone defect such as a CC fracture, a non-union fracture, a critical or non-critical size defect, an osteochondral defect, tissue (cartilage or soft tissue or neural CC tissue) degenerative condition, a fusion or a bony void, in a mammal. The morphogenic devices are useful for treating tissue injuries, tissue CC degeneration and other tissue diseases, congenital diseases and CC corposetic device is useful in the treatment of osteogenic device is useful in the treatment of osteogenic for treations and devices are also be useful for treating tissue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
morphogenic compositions and devices are also be useful for treating inflammatory joint diseases such as rheumatoid and psoriatic arthritis, bursitis, ulcerative colitis, SLE-systemic lupus erythematosus, Whipple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; osteogenic protein 1; hOP-1; osteopathic; gene therapy; BMP; bone morphogenic protein; tissue formation; cell proliferation; SIE; systemic lugus erythematosus; jaw bone defect; psoriatic arthritis; congenital disease; osteoarthritis; rheumatoid arthritis; tissue disease; inflammatory joint disease; ulcerative colitis; Whipple's disease; thrombotic thrombocycopenic purpura; bursitis; ankylosing spondylitis; rheumatic fever; amyloidosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 30; Page 56-58; 63pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB; AAD03656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-266158/27.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Improving tissue inductive capability of morphogenic protein at locus in mammal involves administering morphogenic protein with and its soluble receptor, to the target locus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (STYC ) STRYKER CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200123563-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             386
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /label=
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RESULT 172
AAB826
AC AAB826
AC AAB826
AX AAB826
AX Osteog
CC Osteo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                      a non-synthetic, non-polymeric matrix such as collagen or beta-tricalcium phosphate with a binding agent yields an improved osteogenic device with enhanced bone and cartilage repair capabilities. The osteogenic protein may be OP-1, OP-2, bone morphogenic protein (BMP)-2, BMP-4, BMP-5, BMP-6, BMP-9, BMP-10, BMP-11, BMP-12, BMP-15, BMP-16, DPP, Vgl, Vgr, 60A protein, GDF1, GDF3, GDF5, GDF5, GDF6, GDF9, GDF9, GDF10, GDF11, or their variants, and is especially OP-1. The osteogenic devices promote accelerated formation of repair tissue with enhanced stability using less osteogenic protein than previous devices. Defects susceptible to repair tissue with enhanced stability using less osteogenic protein than previous devices.
                                                       include critical size defects, non-critical size defects, non-union fractures, fractures, osteochondral defects and subchondral defects (claimed), and defects resulting from degenerative diseases such as
                                                                                                                                                                                                                                                                                                                                                                           The present sequence is that of human osteogenic protein OP-1. The invention is based on the discovery that admixing osteogenic protein and a non-synthetic, non-polymeric matrix such as collagen or beta-tricalcium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Implant for inducing local bone or cartilage formation, comprising osteogenic proteins, non-synthetic polymeric matrixes and binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rueger DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Osteogenic protein; OP-1; human; bone; cartilage; fracture; osteochondral defect; subchondral defect; degenerative disease; osteochondritis desiccans; osteopathy; vulnerary; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human osteogenic protein OP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                disease, ankylosing spondylitis, rheumatic fever, amyloidosis, thrombotic thrombocytopenic purpura and relapsing polychondritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (RUEG/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US2001016646-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAB82695 standard; protein; 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CHAN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TUCKER M A.
CHANG A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAH26404.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INPETVPKPCCAPTOLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tucker MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Page 50-51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9805-00045331
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
330. .431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      active forms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       . 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "7 cysteine domain, forms of OP-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               59pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
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Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                405
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 present
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Matches 20
                        The invention relates to a method of treating amyotrophic lateral sclerosis, multiple sclerosis or a spinal cord injury, comprising administering a morphogen which stimulates production of an nerve cell adhesion molecule (N-CAM) or L1 isoform by an NG108-15 cell in vitro. Also described is a method of restoring by an NG108-15 cell in vitro. Also described is a method of restoring or preserving motor function in a mammal afflicted with or at risk from amyotrophic lateral sclerosis, multiple sclerosis or a spinal cord injury comprising administering a morphogen which is human osteogenic protein (OP-1), mouse OP-1, human OP-2, 60A, GDP-1 (undefined), bone morphogenetic protein (BMP)2A, BMP2B, DPP (undefined), Vg1 (undefined), Vgr-1, BMP3, BMP5, or BMP6. The present sequence represents the amino acid sequence of human OP-1 which was used as a reference sequence to generate generic polypeptides for use in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; osteogenic protein; OP-1; neuroprotective; amyotrophic lateral sclerosis; multiple sclerosis; spinal cord injury; morphogen; nerve cell adhesion molecule; N-CAM; L1 isoform; BMP2B; motor function; OP-2; 60A; GDF-1; bone morphogenetic protein; BMP2A; BMP2B; DPP; Vg1; Vgr-1; BMP3; BMP5; BMP6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New treatment for amyotrophic lateral sclerosis, multiple sclerosis or spinal cord injury comprises administrating morphogen which stimulates expression of nerve cell adhesion molecule.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-MAR-1991;
30-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAU97017 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rueger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2002049159-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 33-34; 57pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-JUN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-JUL-1992;
23-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RUEG/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2002-415042/44.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SAMPATH K T.
OPPERMANN H.
PANG R H L.
COHEN C M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABK51437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RUEGER D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sampath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 91US-00753059.
92US-00922813.
93US-00126100.
94US-00260675.
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91US-00752764.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (OP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oppermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
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Pred. No. 1.8e-06;
Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ή,
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       Similarity
Conservative
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       Score 111;
Pred. No. 1.
 Mismatches
DB 5;
.8e-06;
              Length
                431;
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INPETVEKPCCAPTQLNAIS 405
             INPETVPKPCCAPTQLNAIS 20
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AAE25993;
                AAE25993
                standard;
               protein; 431
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15-NOV-2002 (first protein 1 entry (hOP-1).

Central nervous system function; morphogen; ischaemia; grasp; trauma; motor coordination function; posture; balance; sensory perception; taste proprioception; olfaction; gait; human osteogenic protein 1; hOP-1; bone morphogenic protein; BMP

Homo sapiens

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ARESULT 174
AREZ5993
AD 225993
AD 225993
AD 225993
AD 225993
AD AREZ59
AD AR
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Domain
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 48. .292
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           label
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C-terminal_six_cysteine_domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C-terminal_seven_cysteine_domain
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21-MAR-1997; 97US-00828281.

22-MAR-1996; 96US-00620444

(CURI-) CURIS

Charette MF, Finklestein SP

2002-573260/61

Method for enhancing recovery comprises administration of a a pair of folded polypeptides of central nervous system function morphogen comprising a dimeric protein and to a mammal suffering trauma or ischemia.

Claim 1; Col 37-40; 41pp; English.

The invention relates to a method for enhancing recovery of central nervous system function. The method involves administration of a morphogen comprising a dimeric protein and a pair of folded polypeptides to a mammal suffering trauma or ischaemia, where the morphogen is not transforming growth factor beta (TGP-beta). The method is useful for enhancing recovery of central nervous system function, i.e. motor coordination function (e.g. posture, balance, grasp or gait) or sensory perception (e.g. speech, vision, touch, taste proprioception or olfaction). The present sequence is human osteogenic protein 1 (hOp-1). Op-1 also referred as bone morphogenic proteins (BMPs) are classified under the subgroup of TGF-beta superfamily of growth factors f central n of a d polypeptides

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Matches Query Match Best Local

l Similarity 20; Conser

Conservative

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Mismatches

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Indels

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100.0%;

Score 111; DB 5; Pred. No. 1.8e-06;

Length 431;

Sequence 431 AA;

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RESULT 175
ABB82416
ID ABB824
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RESULT 176
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                                                                                                                                                                                                                Matches
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                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a porous beta-tricalcium phosphate (TCP) that comprises several pores. The pores are single separate voids having a pore diameter size of 20 - 500 (preferably 410 - 460, 40 - 190, 20 - 95 or 50 - 125) micro m. The beta-TCP induces bone formation, delivers bioactive agent at a site requiring cartilage formation, improves osteoconductivity and regeneration of bone tissue in a living body, repairs a bone defect in a human or animal. The porous beta-TCP granules are biocompatible and support the development of new bone throughout its structural form. The beta-TCP can be used in prosthetic device (e.g. hip device, fusion cage or maxillofacial device). It can be used for bone implantation in implantable device. The present sequence represents a human osteogenic protein-1 (OP-1)
                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 143-144; 151pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Porous beta-tricalcium phosphate material useful for bone implantation i implantable prosthetic device e.g. hip device, fusion cage or maxillofacial device, comprises several pores of specific diameter size.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-740751/80.
N-PSDB; ABV73237.
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21-SEP-2001;
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                                                                                                                                                                                                                                                                                                                                          431 AA;
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2001US-00960789
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                                                                                                                                                                                                   The invention relates to a method for detecting a lung cancer-associated CC transcript in a cell from a patient, comprising contacting a biological CC sample from the patient with a polynucleotide that selectively hybridises CC increased or decreased expression in lung cancer samples. Lung cancer cassociated polynucleotides and polypeptides are used for identifying a compound that modulates a lung cancer-associated polypeptide, for cinhibiting proliferation of a lung cancer-associated polypeptide, for cancer in a patient and for treating a mammal having lung cancer by cancer in a patient and for treating a mammal having lung cancer by cancer in a patient and for treating a mammal having lung cancer by cancer in a patient and for treating a mammal having lung cancer by cancer or other benign or precancerous lesions, e.g. atelectasis, compound interstitial pulmonary disease, fibrosis, hypersensitivity pneumonitis, interstitial pulmonary fibrosis, asthma and bronchiectasis. The genes, polynucleotides and polypeptides are useful for diagnostic purposes and as targets for screening for therapeutic compounds that modulate lung cancer, see asthmodules. Sequences
                                                                   Best Loc
Matches
                                                                                                  Query Match
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10-MAY-2001;
09-NOV-2001;
13-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Detecting a lung cancer-associated transcript in a cell from a patient
for treating lung cancer, by contacting a biological sample from the
patient with a polymucleotide that exhibits increased or decreased
expression in lung cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lung cancer-associated polypeptide; cytostatic; emphysema; antiinflammatory; antiasthmatic; non-small cell lung cancer; atelectasis small cell lung cancer; benign lesion; precancerous lesion; bronchitis; chronic obstructive pulmonary disease; hypersensitivity pneumonitis; interstitial pulmonary fibrosis; fibrosis; asthma; bronchiectasis.
                                                                                                                                       Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 27; Page 438; 453pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aziz N,
                                                                                                                                                                                        ABU56408-ABU56745 represent lung cancer-associated
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                                                                                      Local
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 386 INPETVPKPCCAPTQLNAIS
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                                                                                    Similarity
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                                INPETVPKPCCAPTQLNAIS 20
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; 2001US-0290492P.
; 2001US-0339245P.
; 2001US-0339245P.
; 2001US-0350666P.
; 2001US-0334370P.
; 2002US-0372246P.
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llarity 100.0%;
Conservative 0
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                                                                 Score 111; DB 6;
Pred. No. 1.8e-06;
Mismatches 0;
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                                                                                                    Length 431;
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RESULT 177 ABR44022

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RESULT 178
ABU63427
ID ABU634
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AC ABU634
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AC ABU634
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DT 07-OCT
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DE Human
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Best Local (
                                                                                                                                                                                                                                        The invention relates to a bone precursor composition that comprises cement mixture or solid cement and a pore-forming agent. The pore-forming agent has a particle size of 20 - 500 micro M. The composition is useful for inducing bone formation; in prosthetic devices e.g. a hip device, fusion cage and a maxillofacial device; in ligament repair such as anterior cruciate ligament fixation or ligament attachment in the appendicular system to assist in the integration of ligament and bone; in clinical procedures for joint arthroplasty in hips, knee, elbows, and other joints where a diseased or damaged natural joint is replaced by a prosthetic joint; in clinical procedures such as vertebroplasty. Also useful for treating osteoporosis. The present sequence represents a human osteogenic protein (OP-1), a bone morphogenic protein (BMP) that can be used as a bioactive agent in the bone precursor composition of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bone precursor; osteogenic prote
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human osteogenic
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                                                                                                                                                                                                                                                                                                                                                                                                                 Bone precursor composition useful for inducing bone formation comprises cement mixture or solid cement and pore-forming agent.
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                                                                                                                                                                                                             Sequence 431 AA;
                                07-OCT-2003
                                                    ABU63427
                                                                         ABU63427 standard; protein; 431 AA
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DB; ACC48170.
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20; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein;
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                                                                                                                                                                      Conservative
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                               (first entry)
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                                                                                                                                                                      0;
                                                                                                                                                                      Score 111; DB 6;
Pred. No. 1.8e-06;
; Mismatches 0;
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                                                                                                                                                                                          Length 431;
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The invention relates to a device for implanting in vivo functional construction of the comprises biodegradable matrix and an osteogenic protein (e.g. Op1, osteogenic protein 1) to induce formation and to germit regeneration of new distinct tissue(s). The matrix defines of structure, allows attachment of infiltrating cells, comprises residues derived from distinct tissue(s) and having dimensions and shape which compine to be replaced. Also included are a method for inducing in a mammal the formation of an autologous replacement body part comprising several distinct tissues, a method for restoring comprising several distinct tissues, a method for repairing in vivo articular cartilage on the surface of a bone and a method for restoring comparising several distinct tissues, a method for repairing in vivo in a mammal a non-mineralised tissue in a skeletal joint. The device is such as mammalian skeletal joints. The device is such as mammalian skeletal joints. The device is biocompatible, non-companied and method enables to provide complete the composition and method enables to provide complete the composition and method enables to provide skeletal joint.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Device for implanting in vivo functional replacement body comprises biodegradable matrix and osteogenic protein to i and to permit regeneration of new distinct tissue(s).
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02-JUN-1995; 95US-00459129
13-APR-2000; 2000US-00547601
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 15-16; 22pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-FEB-2002; 2002US-00083825
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present sequence represents human OP1
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DB; ACD28509.
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body; non-mineralised tissue; skeletal
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Sequence 431 A A

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RESULT 179
ABU61634
ID ABU616
XX ABU616
XX 12-AUG
DT 12-AUG
XX Human
XX OP1;
KW tissue
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Matches 20
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                                                                                  ABU61634 standard;
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                                                                                                                                                                   Similarity
                                                                                                                                                          100.0%; ilarity 100.0%; Conservative 0
                                                 (first entry)
                                                                                   protein;
                                                                                   431
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Pred. No. 1.8e-06;
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Human osteogenic protein 1,

OP1

OP1; osteogenic protein-1; central nervous system; ischaemia; tissue-specific morphogenesis; OP-2; 60A; GDF-1; BMP-2A; BMP21growth differentiation factor-1; bone morphogenetic protein-2

BMP-2A; BMP2B; cic protein-2A;

trauma

Human osteogenic protein-1,

OP-1.

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386

INPETVPKPCCAPTQLNAIS 405

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The invention relates to enhancing recovery of central nervous system CC function in a mammal, involves administering an effective amount of a C morphogen to a mammal afflicted with a central nervous system thighty comprises a dimeric comprises a dimeric comprises a dimeric comprises a pair of folded polypeptides. Each folded comprises a pair of folded from human of folded polypeptides. Each folded poly
                                               Query Match
Best Local (
         Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Vgr-1; BMP-3; BMP-5; BMP-6; motor coordination function; posture; balance; grasp; gait; sensory perception; speech; stroke; hypertension; hypertensive cerebral vascular disease; aneurysm; angioma; blood dyscrasia; cardiac failure; cardiac arrest; cardiogenic shock; kidney failure; septic shock; head trauma; spinal cord trauma; seizure; tumour bleeding; loss of blood volume; blood pressure; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Charette MF, Finklestein SP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-MAR-1996;
21-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 21-22; 39pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-FEB-2002; 2002US-00062370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US2003022830-A1
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                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHARETTE M F.
FINKLESTEIN S P.
                                                                                                                                                                                   431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              96US-00620444.
97US-00828281.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "C-terminal seven-cysteine domain. This domain
specifically claimed in claim 1"
                                          100.0%;
0;
                                          Score 111; DB 7;
Pred. No. 1.8e-06;
    Mismatches
                                                                                Length 431;
0
Gaps
0
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1 INPETVPKPCCAPTQLNAIS 20

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RESULT 180
ABR62827
ID ABR628
XX ABR628
XX ABR628
XX BONE M
WW CPhtha
XX HOMO S
XX WO2003
XX HOMO S
XX HOMO S
XX HOMO S
XX WO2003
XX HOMO S
XX HOMO S
XX HOMO S
XX D1-OCT
XX ALCO-
PA (UYNT-
XX D1-SDB
XX WPI; 2
DR WPI; 2
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence is the protein sequence of human bone morphogenic protein 7 (BMP-7). RT-PCR showed BMP-7 to be expressed in the human trabecular meshwork and optic nerve head. A claimed method for diagnosing glaucoma involves detecting altered expression of a BMP family member such as BMP-7 by PCR in a sample obtained e.g. from blood or buccal cells. A claimed method for treating glaucoma comprises administering an agonist of BMP-2, BMP-4, BMP-5, BMP-7 or Smad 1/5, or an antagonist of chordin, gremlin or follistatin. A claimed method of identifying a substance that inhibits or stimulates BMP-induced Smad signalling pathways or BMP-regulated gene expression, using recombinant cells expressing BMP-2A, BMP-4, BMP-5 or BMP-7
Ovarian cancer-associated protein #29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 431 AA;
                                                                   04-DEC-2003 (first entry)
                                                                                                                                                                                                    ADB80494 standard; protein; 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Fig 4a-c; 55pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Diagnosing glaucoma in a sample comprises detecting altered expression of bone morphogenic proteins in sample from a cell or bodily fluid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-OCT-2001; 2001US-0334852P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human bone morphogenic
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(UYNT-) UNIV NORTH TEXAS HEALTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2003-559253/52.
DB; ACF05923.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ch 100.0%;
1 Similarity 100.0%;
20; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 111; DB 7;
Pred. No. 1.8e-06;
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0,

cytostatic; gene therapy; vaccine; ovarian cancer; diagnosis; post-operative chemotherapy; radiation therapy; tumour progno pre-cancerous lesion detection.

WO2002102235-A2

18-JUN-2002; 27-DEC-2002

2002WO-US019297

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175 ·

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RESULT 182
ABWOOT
XX
ABWOOT
AC ABWOOT
XX
15-JAN
XX
XX
DE Human
XX
XW Parkin
XW nigros
XW nigros
XW nhomo s
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                           The invention relates to a method of detecting an ovarian cancer-
associated transcript in a cell from a patient, by contacting a
biological sample from the patient with a polynucleotide that selectively
hybridizes to a sequence at least 80% identical to any of one of 80
nucleic acid sequences given in the specification. The method is useful
in diagnosing ovarian cancer and in identifying and using agents and/or
targets that inhibit ovarian cancer. The mucleic acid molecule,
polypeptide and the antibody may also be used in detecting ovarian
cancers, monitoring and early detection of relapse following treatment,
monitoring response to therapy, selecting patients for post-operative
chemotherapy or radiation therapy, in selecting mode of therapy,
and as vaccines. This sequence corresponds to one of the proteins used
for the detection method of the invention.
                     Parkinson's disease; nerve-cell adhesion molecule; L1; DPP; Vg1; nigrostriatal pathway; therapy; morphogen; osteogenic protein; OlGDF-1; bone morphogenic protein; BMP; human.
                                                                                                                                                                                                                                                                                                                    Sequence 431
                                                                          Human osteogenic
                                                                                                    15-JAN-2004
                                                                                                                                                      ABW00788
 sapiens
                                                                                                                                                                                                                   386
                                                                                                                                                                                                                                                                     20;
                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                    standard;
                                                                                                                                                                                                                   INPETVEKECCAPTOLNAIS 405
                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                      AA;
                                                                                                    (first
                                                                          protein (hOP)-1.
                                                                                                                                                    protein;
                                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                                       431
                                                                                                                                                                                                                                                                     0;
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Pred. No. 1.8e-06;
Mismatches 0;
                                                                                                                                                                                                                                                                                             Length 431;
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                                                    Vgr-1;
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Parkinson's disease; therapeutic; therapy; osteogenic protein-1; OP-1; morphogen; motor coordination; tremor; rigidity; bradykinesia; equilibrium deficit; posture deficit; neuronal cell survival; neuropatinigrostriatal pathway; cell adhesion molecule; CAM; human.

Human osteogenic protein (OP) -1.

22-APR-2004

(first entry

standard;

protein; 431 AA

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RESULT 183
ADI39797
ID ADI397
XX ADI397
XX ADI397
XX 22-APR
XX YUMAN
CE Human
XX Parkin
XX Parki
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Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a method for treating Parkinson's disease which involves using a morphogen that stimulates production of a nerve-cell adhesion molecule or I1 by a specific cell in vitro. The invention is used to treat Parkinson's disease and to restore or preserve neural cell function in a mammal afflicted with Parkinson's disease. It is used to restore or maintain the integrity of the nigrostriatal pathway or to prevent degeneration of the nigrostriatal pathway in a mammal afflicted with Parkinson's disease. In the treatment method, morphogen may be complexed with a pro-domain polypeptide that is the pro-domain of osteogenic protein (OP)-1, OP-2, 60A, GDF-1, bone morphogenic protein (SMP)2A, BMP2B, DPP, VGI-1, BMP3, BMP5, or BMP-6. The present sequence is the human OP-1 protein. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-JUL-1992;
23-SEP-1993;
16-JUN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Treating Parkinsons disease comprises using a morphogen that stimulates production of a nerve-cell adhesion molecule or L1 by a specific cell in
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(SAMP/)
(COHE/)
(OPPE/)
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30-AUG-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 431
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (PANG/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2003-801273/75.
DB; AAD61577.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    386
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COHEN C M.
OPPERMANN H.
PANG R H L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sampath KT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Silarity 100.0%; FConservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A.
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94US-00260675
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91US-00753059.
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Pred. No. 1.8e-06;
); Mismatches 0;
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Detecting an ovarian cancer-associated transcript in a cell patient, comprises contacting a biological sample from the polynuclectide that hybridizes to an ovarian cancer gene.

patient from

with

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Claim 13;

Page 294; 332pp; English.

18-UUN-2001; 2001US-0299234P.
27-AUG-2001; 2001US-0315287P.
05-SEP-2001; 2001US-0317544P.
13-NOV-2001; 2001US-0350666P.
12-APR-2002; 2002US-0372246P.

Mack DH,

Gish KC;

EOS

BIOTECHNOLOGY INC

2003-167431/16.

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RESULT 184
ADJ62677
ID ADJ626
XX
AC ADJ626
XX
DT 06-MAY
XX
DT 06-MAY
XX
XX
XX
MW human;
KW endoch
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                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to therapeutic methods and compositions for CC treating Parkinson's disease including methods of enhancing the survival CC of neural cells. A mammal with symptoms of Parkinson's disease is treated CC by administering a soluble human osteogenic protein (OP)-1 morphogen to CC the site of neutral damage or neuropathy in the mammal. The invention is CC consisting of motor coordination, tremor, rigidity, bradykinesia or CC deficits in equilibrium and posture, to restore motor function. The CC damaged neurons at the risk of dying, including enhancing the CC survival of neurons at the risk of dying, including the neurons to CC maintain their differentiated phenotype. It stimulates the expression of CC cell adhesion molecule (CAM) in neurons and enhances neuronal cell cell adhesion means for detecting and monitoring neuropathies in a CC mammal. It also provides means for evaluating the status of nerve tissue, including means of detecting and monitoring neuropathies in a CC mammal. It also prevents degeneration of the nigrostriatal pathway or CC consers to mammal it apprevents degeneration of the nigrostriatal pathway or CC consers to mammal activity associated with this pathway. The present
                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                      Query Match
Best Local
human; osteogenic protein 1; OP1; osteogenic device; endochondral bone formation; bone repair; cartilage repair;
                                           Human osteogenic protein 1, OP1.
                                                                               06-MAY-2004
                                                                                                              ADJ62677;
                                                                                                                                             ADJ62677 standard; protein; 431 AA
                                                                                                                                                                                                                                                                                                                                                   Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Treatment of mammal with symptoms of Parkinson's disease by administering soluble human OP-1 polypeptide morphogen containing amino acid sequence to site of neutral damage or neuropathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-584258/55.
N-PSDB; ADI39796.
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Region
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23-SEP-1993;
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30-AUG-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-JUN-1994;
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                                                                                                                                                                                                                                                                                       l Similarity
20; Conserv
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Γ.
                                                                                                                                                                                                                          INPETVEKECCAPTOLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                   human osteogenic
                                                                                                                                                                                                                                                                                       Conservative
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                                                                           (first entry)
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92US-00922813.
93US-00126100.
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330. .431
/note= "Specifically claimed in Claim
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                                                                                                                                                                                                                                                                                                                                                                                 protein-1.
                                                                                                                                                                                                                                                                                                      Score 111; DB 7;
Pred. No. 1.8e-06;
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                                                                                                                                                                                                                                                                                                                     Length 431;
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RESULT 185 ADN39200

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386 μ

INPETVPKPCCAPTQLNAIS 405 INPETVPKPCCAPTQLNAIS 20 Similarity 20; Conserv

Conservative

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Gaps

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Query Match
Best Local S
Matches 20
                                                                               The invention relates to an osteogenic device for implantation in a mammal, comprising a ceramic or biodegradable non-collagen polymer matrix defining pores of a dimension sufficient to permit influx, differentiation and proliferation of migratory progenitor cells from the body of mammal, and a substantially pure osteogenic protein competent to induce endochondral bone formation when disposed in the matrix and implanted in mammals. The device is useful for producing endochondral bone formation in mammals, for bone and cartilage repair, for inducing the full developmental cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation at the locus of an implant when implanted in a mammalian body. The device is useful for bone formation in various orthopedic, periodontal and reconstructive procedures. The present sequence represents the amino acid sequence of the human osteogenic protein 1, OP1.
                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 200
N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-FEB-1991;
20-DEC-1991;
28-JAN-1992;
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21-NOV-1990;
04-DEC-1990;
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17-OCT-1989;
17-OCT-1989;
17-OCT-1989;
                                                        Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                               Osteogenic device useful for inducing endochondral bone formation mammals, comprises ceramic or biodegradable non-collagen polymer maturalining substantially pure natural-sourced mammalian osteogenic
                                                                                                                                                                                                                                                                                                        Disclosure; SEQ ID NO 2; 127pp; English.
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07-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-APR-1988;
15-AUG-1988;
                                                                                                                                                                                                                                                                                                                                     protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   vascularisation; mineralisation; bone marrow differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (STYC ) STRYKER CORP.
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DB; ADJ62676, ADJ62678.
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91US-00660162.
91US-00810560.
92US-00827052.
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90US-00621849.
90US-00621988.
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100.0%; Score 111; DB 7;
100.0%; Pred. No. 1.8e-06;
ive 0; Mismatches 0;
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                           Length 431;
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ADN39200 standard;

protein; 431

(first

entry)

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The invention relates to nucleic acids and proteins (ADN38683-ADN40064) whose expression is upregulated or downregulated in specific cancers or cother diseases such as angiogenic or fibrotic disorders, and to methods of determining the presence or absence of a pathological cell in a patient by detecting a nucleic acid at least 80% identical to those of the invention or by detecting a polypeptide of the invention. The compression vectors and host cells comprising a nucleic acid of the invention; antibodies which specifically bind a nucleic acid of the invention; antibodies which specifically bind a polypeptide of the invention; antibodies for drug targeting; and methods of screening for modulators of activity or expression of the collypeptides and methods are useful for diagnosing, prognosing and treating cancer and other conditions such as psoriasis, inchaemia, heart disease, atherosclerosis, inflammatory diseases, autoimmune diseases, retinal concernation syndromes, scarring and uterine fibroids. They may calso be useful in wound healing and in contraception. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; differential expression; cancer; angiogenic disorder; fibrotic disorder; psoriasis; ischaemia; heart disease; atherosclerosis; inflammatory disease; autoimmune disease; retinal neovascularistaion syndrome; scarring; uterine fibroid; detection; diagnosis; prognosis; drug screening; drug targeting;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         detection; diagnosis; prognosis; drug screening; druwound healing; contraception; cytostatic; cardiant; vulnerary; gene therapy; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Determining the presence or absence of a pathological cell in a patient, useful for diagnosing, prognosing or treating cancer, comprises detecting a nucleic acid in a biological sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1385pp; English.
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E, Zlotnik
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k A;
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Best Local S
Matches 20
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21-NOV-2001; 2001US-033494P.
29-NOV-2001; 2001US-0334393P.
03-DEC-2001; 2001US-0335394P.
14-DEC-2001; 2001US-034731P.
10-JAN-2002; 2002US-0347319P.
10-JAN-2002; 2002US-0347349P.
20-FEB-2002; 2002US-0355250P.
13-FEB-2002; 2002US-0359077P.
29-MAR-2002; 2002US-036809P.
14-PER-2002; 2002US-0370110P.
12-APR-2002; 2002US-037014P.
29-UN-2002; 2002US-03907945P.
22-UUL-2002; 2002US-0397845P.
29-UUL-2002; 2002US-0397845P.
29-SEP-2002; 2002US-0397845P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; differential expression; cancer; angiogenic disorder; fibrotic disorder; psoriasis; ischaemia; heart disease; athe inflammatory disease; autoimmune disease;
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                                                                                                                                   Determining the presence or absence of a pathological cell in a patient, useful for diagnosing, prognosing or treating cancer, comprises detecting a nucleic acid in a biological sample.
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                                                                                                                                                                                                                                                                   WPI; 2003-468649/44.
N-PSDB; ADN39468.
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l similarity 100.0%;
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Murray R,
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R, Watson SR,
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Pred. No. 1.8
0; Mismatches
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Wilson KE,
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.8e-06;
s 0;
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E, Zlotnik
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Afar Mack

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Aziz N, Murray

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Ginsburg WM, R, Watson SR,

2003-468649/44. DB; ADN39199.

SEQ ID NO

518;

The invention relates

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nucleic

acids and English.

proteins

(ADN38683-ADN40064)

Claim 12;

SEQ

H

NO A69; 1385pp;

(EOSB-)

BIOTECHNOLOGY INC

13-NOV-2001; 2001US-0350666.
21-NOV-2001; 2001US-03343939.
29-NOV-2001; 2001US-0335394P.
03-DEC-2001; 2001US-0340376P.
08-JAN-2002; 2002US-03473499.
10-JAN-2002; 2002US-0347349P.
10-FEB-2002; 2002US-0355250P.
13-FEB-2002; 2002US-0355250P.
13-FEB-2002; 2002US-03590779.
29-MAR-2002; 2002US-0368809P.
04-APR-2002; 2002US-0368614P.
12-APR-2002; 2002US-0386614P.
15-JUL-2002; 2002US-0396839P.
22-JUL-2002; 2002US-039845P.
22-JUL-2002; 2002US-039845P.
22-JUL-2002; 2002US-039845P.

13-NOV-2002;

2002WO-US036810

WO2003042661-A2

cc whose expression is upregulated or downregulated in specific cancers or cother diseases such as angiogenic or fibrotic disorders, and to methods cc of determining the presence or absence of a pathological cell in a cc patient by detecting a nucleic acid at least 80% identical to those of the invention or by detecting a polypeptide of the invention. The cc invention also relates to expression vectors and host cells comprising a cc polypeptide of the invention; antibodies which specifically bind a cc polypeptide of the invention; antibodies which specifically bind a cc polypeptide of the invention; antibodies which specifically bind a cc polypeptide of the invention; antibodies which specifically bind a cc polypeptide of the invention; antibodies which specifically bind a cc polypeptide of the invention; and antibodies for drug targeting; cc and methods of screening for modulators of activity or expression of the cc polypeptides and nucleic acids. The nucleic acids, polypeptides, cancer and other conditions such as psoriasis, ischaemia, heart disease, catherosclerosis, inflammatory diseases, autoimmune diseases, retinal concretaceptions. The present cc sequence represents a polypeptide of the invention. The present cc sequence represents a polypeptide of the invention.

Sequence 431 AA;

밁 Ś Query Match Best Local S Matches 20 386 Similarity 20; Conser INPETVPKPCCAPTQLNAIS 405 INPETVPKPCCAPTQLNAIS 20 100.0%; larity 100.0%; Conservative 0 0 Score 111; DB 7; Pred. No. 1.8e-06;); Mismatches 0; 0; Gaps

Length 431;

0

ADN39488 RESULT 187

ADN39488 standard; protein; 431

17-JUN-2004 (first entry)

Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:A88

Human; differential expression; cancer; angiogenic disorder; fibrotic disorder; psoriasis; ischaemia; heart disease; athe inflammatory disease; autoimmune disease; retinal neovascularistaion syndrome; scarring; uterine fibroid; disease; atherosclerosis;

detection; diagnosis; prognosis; drug screening; wound healing; contraception; cytostatic; cardiant; drug targeting;

vulnerary; gene therapy; vaccine

W02003042661-A2

22-MAY-2003

2001US-0350666P 2002WO-US036810

13-NOV-2001; 21-NOV-2001; 14-DEC-2001;

10-JAN-2002 10-JAN-2002 08-FEB-2002 13-FEB-2002 20-FEB-2002 20-FEB-2002 29-MAR-2002 12-APR-2002 12-APR-2002 15-JUN-2002 2001US-0340376P.
2002US-0347341P.
2002US-0347349P.
2002US-0355250P.
2002US-0356714P.
2002US-03568809P.
2002US-0368809P.
2002US-0370110P.
2002US-0370110P.
2002US-0370110P.
2002US-0386849P.
2002US-0396839P.
2002US-0396839P.

(EOSB-) EOS BIOTECHNOLOGY INC

Afar Mack H, Aziz N, Gi Ginsburg WM, R, Watson SR, Gish KC, G: Wilson KE, Glynne R, E, Zlotnik Hevezi PA; A;

WPI; 2003-468649/44. N-PSDB; ADN39487.

Determining the presence or absence of a pathological useful for diagnosing, prognosing or treating cancer, a nucleic acid in a biological sample. cell in a patient, comprises detecting

Claim 12; SEQ ID NO A88; 1385pp; English.

The invention relates to nucleic acids and proteins (ADN38683-ADN40064)

CO whose expression is upregulated or downregulated in specific cancers or other diseases such as angiogenic or fibrotic disorders, and to methods co fetermining the presence or absence of a pathological cell in a comparison or by detecting a nucleic acid at least 80% identical to those of the invention or by detecting a polypeptide of the invention. The comprising a concert acid of the invention, antibodies which specifically bind a collect acid of the invention, use of such antibodies for drug targeting; and methods of screening for modulators of activity or expression of the polypeptides and methods are useful for diagnosing, prognosing and treating cancer and other conditions such as psoriasis, ischaemia, heart disease, atherosclerosis, inflammatory diseases, autoimmune diseases, retinal conversed in wound healing and in contraception. The present consequence represents a polypeptide of the invention.

Sequence 431 AA;

Ś Matches Query Match Local 1 INPETVPKPCCAPTQLNAIS 20 1 Similarity 20; Conser 100.0%; ilarity 100.0%; Conservative 0; Score 111; DB 7; Pred. No. 1.8e-06; Mismatches Length Indels 431; o ;-Gaps

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RESULT 188 ADN39525

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386

INPETVPKPCCAPTQLNAIS 405

ADN39525 standard; protein; 431

17-JUN-2004 (first entry)

Cancer/angiogenesis/fibrosis-related polypeptide, SEQ ID NO:A125.

inflammatory disease; autoimmune disease; retinal neovascularistation syndrome; scarring; uterine fibroid; detection, diagnosis; prognosis; drug screening; drug targeting; wound healing; contraception; cytostatic; cardiant; immunomodulatory; vulnerary; gene therapy; vaccine. fibrotic disorder; psoriasis; ischaemia; heart differential expression; cancer; angiogenic disorder, disease; atherosclerosis;

Homo sapiens.

WO2003042661-A2

13-NOV-2002; 2002WO-US036810

13-NOV-2001; 21-NOV-2001; 29-NOV-2001; 03-DEC-2001; 2001US-0350666P

2001US-0332464P. 2001US-0334393P. 2001US-0335394P.

14-DEC-2001 08-JAN-2002 10-JAN-2002 10-JAN-2002 08-FEB-2002 13-FEB-2002 20-FEB-2002 20-FEB-2002 04-AFR-2002 12-AFR-2002 15-JUN-2002 16-JUN-2002 22-JUL-2002 22-JUL-2002

2002US-0370110P. 2002US-0372246P. 2002US-0386614P.

2001US-0340376P.
2002US-0347341P.
2002US-0347349P.
2002US-0355250P.
2002US-0356714P.
2002US-0359077P.
2002US-0368809P.

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RESULT 189
ADE52748
ID ADE527
AC ADE527
AC ADE527
XX 29-JAN
XX 29-JAN
XX 4W Human
XX Human
XX Human
XX endocit
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XX Homo's
                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to nucleic acids and proteins (ADN38683-ADN40064) cc whose expression is upregulated or downregulated in specific cancers or cother diseases such as angiogenic or fibrotic disorders, and to methods of determining the presence or absence of a pathological cell in a cc patient by detecting a nucleic acid at least 80% identical to those of the invention or by detecting a polypeptide of the invention. The cc invention also relates to expression vectors and host cells comprising a nucleic acid of the invention; use of such antibodies for drug targeting; and methods of screening for modulators of activity or expression of the collypeptides and methods are useful for diagnosing, prognosing and treating cancer and other conditions such as psoriasis, ischaemia, heart disease, catherosclerosis, inflammatory diseases, autoimmune diseases, retinal neovascularistaion syndromes, scarring and uterine fibroids. They may calso be useful in wound healing and in contraception. The present cx
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Mack
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; 2002US-0397775P.
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; 2002US-0409450P.
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Wilson KE,
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E, Zlotnik
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      The invention relates to an osteogenic device for implantation in a mammal, comprising osteogenic protein (OP) dispersed within a biocompatible, in vivo biodegradable matrix, where OP comprises a pair (P) of unglycosylated protein chains disulphide bonded to produce dimeric species having a conformation so that (P) is capable of inducing endochondral bone formation in mammal when disposed in the matrix and accessible to the cells. Also included are substantially a pure mammalian osteogenic protein (comprising a pair of unglycosylated polypeptide chains and capable of inducing endochondral bone formation in association with a matrix when implanted in a mammal, where the osteogenic protein
                                                                                                                                                                                                                   Osteogenic device for inducing endochondral bone formation, osteogenic protein comprising a pair of unglycosylated proteinstide bonded to produce dimeric species, dispersed with
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Human; osteogenic endochondral bone

protein; OP1; CBMP2A; CBMP2B; osteogenic device; formation; cartilage formation; non-union fractu

fracture;

biocompatible matrix.

2004-008898/01. DB; ADE52747.

Disclosure; SEQ ID NO 2;

130pp;

English.

protein chains within

reconstructive

Human osteogenic protein,

Homo sapiens

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04-DEC-1990;
22-FEB-1991;
20-DEC-1991;
28-JAN-1992;
21-FEB-1992;
21-FEB-1992;
01-NOV-1993;
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18-OCT-1990;
18-OCT-1990;
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Oppermann H,
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22-FEB-1990;
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23-FEB-1989;
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                       (OPPE/)
(OZKA/)
(KUBE/)
(RUEG/)
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                               OPPERMANN H.
OZKAYNAK E.
KUBERASAMPATH
               RUEGER D C.
PANG R H L.
Ozkaynak
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90US-00616374
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RESULT 190
ADH11584
ID ADH1158
XX ADH1158
AC ADH115
XX ADH115
XX Human
XX Human
XX Human
XX Human
XX Insul
XX Insul
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Best Local Similarity
                                                                     17-MAR-2000; 2000US-0190067P.
16-MAR-2001; 2001US-00809269.
23-MAR-2001; 2001WO-US009229.
17-JAN-2002; 2002US-0348621P.
22-JAN-2002; 2002US-0349356P.
28-JAN-2002; 2002US-0351520P.
06-FEB-2002; 2002US-0354265P.
15-FEB-2002; 2002US-035749P.
16-JAN-2003; 2003US-00345236.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; bone morphogenic protein; BMP; weight gain; appetite suppression; fat mass reduction; cell sensitivity; glucose uptake; diabetes; insulin resistance; hyperglycaemia; hypertension; coronary artery disease; renal failure; neuropathy; metabolic disorder; glucose metabolism disorder; endocrine disorder; obesity; weight loss; liver disorder; cartilage growth disorder; bone growth disorder; inflammation; aberrant cell growth; liver cancer.
           (YOUN/) YOUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-FEB-2003; 2003US-00366345
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CC polypeptides and the polymucleotides encoding them. The invention also

CC relates to a method for limiting weight gain, suppressing appetite or

CC reducing fat mass, comprising administering to a mammalian subject a

CC therapeutic amount of a BMP polypeptide, and a method for increasing the

CC sensitivity of a cell to insulin or increasing glucose uptake by a cell,

CC comprising contacting the cell with a BMP polypeptide. The BMP

CC polypeptides and polymucleotides are useful for diagnosing a pathological

CC polypeptides and polymucleotides are useful for diagnosing a pathological

CC condition or a susceptibility to a pathological condition, e.g.

CC diabetes, insulin resistance, hyperslycaemia, hypertension, coronary

CC diabetes, insulin resistance, hyperglycaemia, hypertension, coronary

CC diabetes, insulin resistance, hyperglycaemia, hypertension, coronary

CC disorders, cartilage and bone growth disorders, besity, weight loss, liver

CC disorders, cartilage and bone growth disorders, inflammation or aberrant

CC cell growth such as liver cancer. The BMP polypeptides and

CC limiting weight gain, suppressing appetite, reducing fat mass, increasing

CC the sensitivity of a cell to insulin or increasing glucose uptake by a

CC cell. This sequence represents a human BMP polypeptide of the invention.
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Matches
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                                                                                                                                                                                                                             antiarteriosclerotic; anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antiparkinsonian; anticonvulsant; osteopathic; antiarthritic; antiparkinsonian; antiactory; dermatological; antiasthmatic; antilipaemic; metabolic; diabetes; obesity; infection; anorexia; cancer; cardiovascular; hypertension; atherosclerosis; neurodegenerative; Alzheiner's disease; Parkinson's; epilepsy; immune; osteoarthritis; haemopoietic; inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis; cell differentiation; proliferation; haemopoiesis; wound healing; angiogenesis; gene therapy; chromosome mapping; tissue typing; harmacoconomic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 431 AA;
                                                                         WO2003093432~A2
                                                                                                                                                                                                          pharmacogenomic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NOVX; antidiabetic; anorectic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human NOV1c protein - SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADH17316 standard; protein; 431 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          neuropathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New bone morphogenic protein polypeptides and polynucleotides, useful for diagnosing, preventing, treating or ameliorating a medical condition, e.g. diabetes, dyslipidemia, hypertension, coronary artery disease or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Young PE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (RUBE/) RUBEN S
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20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
llarity 100.0%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ID NO 39; 224pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 111;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cardiant; hypotensive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 8;
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                                                                                                                                                                                                                                                                                                                                                                                           Parkinson's;
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13-NOV-2003

02-MAY-2003;

2003WO-US013690

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The invention relates to a novel isolated NOVX polypeptide. The cardiant, hypotensive, antiarteriosclerotic, anorectic, virucide, antibacterial, fungicide, protozoacide, nootropic, neuroprotective, cantibacterial, fungicide, protozoacide, nootropic, neuroprotective, contibacterial, fungicide, protozoacide, nootropic, neuroprotective, contingarkinsonian, anticonvulsant, osteopathic, antiarthritic, antiparkinsonian, anticonvulsant, osteopathic, antiarthritic, contingarkinsonian, anticonvulsant, osteopathic, antiarthritic, antiparkinsonian, dermatological, antiasthmatic and antibodies may be useful in the manufacture of a medicament for treating metabolic contingary, diabetes, obesity, infectious diseases (viral, bacterial, contingary), definition, and protozoall, anorexia, cancer, cardiovascular contingary, infectious disease, epilepsy, immune contingary, including hypertension and atherosclerosis, neurodegenerative contingary, also be used as targets for the identification of small molecules that modulate or inhibit neurogenesis, cell. Contingary and the ingeneration of antibodies that bind immunospecifically to NoVX substances for use in therapeutic or diagnostic methods. The nucleic acids may be further used as contingary preventive medicine and pharmacogenomics. The current sequence is that of the human contains of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-MAY-2002; 2002US-0377321P.
06-MAY-2002; 2002US-0383075P.
24-MAY-2002; 2002US-0384044P.
29-MAY-2002; 2002US-0384295P.
30-MAY-2002; 2002US-0384295P.
30-MAY-2002; 2002US-0384357P.
30-MAY-2002; 2002US-0384357P.
31-MAY-2002; 2002US-0384357P.
31-MAY-2002; 2002US-0384357P.
31-MAY-2002; 2002US-038331P.
09-AUG-2002; 2002US-0402154P.
09-AUG-2002; 2002US-0402154P.
09-AUG-2002; 2002US-0402154P.
09-AUG-2002; 2002US-0402154P.
09-AUG-2002; 2002US-040215P.
27-AUG-2002; 2002US-0405175P.
27-AUG-2002; 2002US-0405175P.
28-D-2002; 2002US-0412954P.
30-SEP-2002; 2002US-0412954P.
31-CCT-2002; 2002US-0412954P.
31-CCT-2002; 2002US-0412954P.
31-CCT-2002; 2002US-0422847P.
01-MAY-2003; 2002US-0422847P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New isolated NOVX polypeptide, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alvarez E, Anderson DW, Boldog FL, Catterton E, Edinger SR; Fernandes ER, Gerlach VL, Gorman L, Grosse WM, Guo X, Ji W, Kekuda R, Li L, Macdougall JR, Padigaru M, Patturajan M; Peterson JD, Rastelli L, Shimkets RA, Spytek KA, Stone DJ; Vernet CAM, Voss EZ, Zhong M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 6; 478pp; English.
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Query Match 100.0%; Score 111; DB 8; Best Local Similarity 100.0%; Pred. No. 1.8e-06; Matches 20; Conservative 0; Mismatches 0;

Length 431; Indels

0

Gaps

0,

ADM80486;

RESULT 193 ADM80486

ADM80486 standard;

protein;

431

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386

INPETVPKPCCAPTQLNAIS 405

Н 20;

INPETVPKPCCAPTQLNAIS

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Gaps

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Sequence 431

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RESULT 192
ADI25169
ID ADI251
AC ADI251
XX DI 15-APR
XX Ligame
KW Ligame
KW Ligame
KW aggrec
XX ADI261
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          Query Match
Best Local S
Matches 20
                                                                                                                                                                                                 The invention relates to a novel method for treating a ligament defect in a patient. The method involves: administering to the patient an effective amount of a bone morphogenic protein, transfecting the cultured ligament cells with a nucleic acid sequence encoding a bone morphogenic protein or a growth factor; treating the cultured ligament cells with a bone morphogenic protein, and culturing the ligament cells with a bone sufficient to allow formation of a ligament cells for a time sufficient to allow formation of a ligament cell-associated matrix is chosen from type 1 collagen, clastin, decorin and aggreean. The invention further includes a composition comprising cultured ligament cells and a bone morphogenic protein. The method of the invention is useful for treating (repairing, regenerating, forming or promoting) a ligament defect in a patient. This sequence represents a bone morphogenic protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Treating ligament defects in patients, involves isolating ligament culturing ligament cells ex-vivo, recovering cultured ligament cell implanting the recovered ligament cells into the patient.
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ligament
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N-PSDB; ADI25178.
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                                                                                                                                               Sequence 431 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-JUL-2003; 2003WO-US021697.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 1; 95pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              386
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n 100.0%;
Similarity 100.0%;
20; Conservative 0
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cell-associated matrix; type 1 collagen; elastin; decorin;
; OP-1; osteogenic protein-1; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INPETVPKPCCAPTQLNAIS
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          Score 111; DB 8;
Pred. No. 1.8e-05;
; Mismatches 0;
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                                                                                     Length 431;
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                                                            Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                           The invention relates to an osteogenic device for implantation in mammal, comprising osteogenic protein dispersed within biocompatible matrix defining pores, differentiation, and proliferation of migratory progenitor cells from body of mammal, improvement where osteogenic protein comprises pair of unglycosylated protein chains disulfide bonded to produce dimeric species capable of inducing endochondral bone formation. The device is useful for inducing endochondral bone formation in a non-union fracture in a mammal, for inducing carrilage or endochondral bone formation in a mammal, for use in periodontal or dental reconstructive procedures, for use in cartilage repair in a mammal, for use in endochondral bone reconstructive procedures. The device is useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-APR-1988;
15-AUG-1988;
28-JAN-1992;
21-FEB-1992;
01-NOV-1993;
24-MAY-1995;
                                                                                                                                                           for inducing cartilage or endochondral bond formation in a mammal comprising the step of implanting the mammal at a locus accessible to migratory progenitor cells. The device is useful for inducing local cartilage bone formation and endochondral bone formation in a non-union fracture in a mammal. The antibody capable of binding specifically to the osteogenic protein is useful for selectively extracting osteogenic protein from a mixture of molecules. The present sequence represents the amino acid sequence of the human osteogenic protein, OP1.
                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Osteogenic device for implantation in mammal comprising osteogenic protein dispersed within biocompatible matrix, osteogenic protein comprising pair of unglycosylated protein chains, inducing endochor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         comprising pair
bone formation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Opperman H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-DEC-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cartilage repair.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               periodontal reconstructive procedure; dental reconstructive procedure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (STYC)
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DB; ADM80485, ADM80487.
386
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                                                            ch 100.0%; l Similarity 100.0%; 20; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 osteogenic
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INPETVEKECCAPTOLNAIS
                          INPETVPKPCCAPTQLNAIS 20
                                                                                                                                431 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 yenic device; osteogenic protein; OP1; biocompatible matrix;
bone formation; non-union fracture; cartilage formation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2002US-00321799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88US-00179406.

88US-00232630.

92US-00827052.

92US-00841646.

93US-00147023.

95US-00449699.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2; 136pp; English
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                                                            0
                                                                            Pred.
405
                                                                Mismatches
                                                                            111; DB 8;
No. 1.8e-06;
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                                                                                            Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     inducing endochondral
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                                                                                                                                                    CC This invention relates to a novel method for treating or preventing CC chronic renal failure and other associated mammalian renal disorders. CC Specifically, it refers to cojointly administering osteogenic protein (CC (OP) or bone morphogenetic protein (BMP) morphogens with an angiotensin CC receptor antagonist/ blocker (AIRA). The present invention describes (CI using these compositions as inducers of proliferation and differentiation of renal tissue, and as such can be used to prevent, inhibit, delay or CC alleviate the progressive loss of renal function and differentiation or CC alleviate the progressive loss of renal function and the decline in CC glomerular filtration rate (GFR) characterised by chronic renal failure. CC Furthermore, they can be useful for treating conditions such as end-stage (CC renal disease (ESRD), chronic diabetic nephropathy, diabetic renal failure. CC hypertensive glomerulosclerosis, chronic glomerulonephritis, hereditary (CC nephritis and renal dysplasia where the mammal is a kidney transplant recipient. Accordingly, compositions exhibit antidiabetic, nephrotropic, antininflammatory and vasotropic activities. This polypeptide sequence is CC antininfammatory and vasotropic activities. This polypeptide sequence is
                                                                            Matches
                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Treating or preventing chronic renal failure in mammal, comprises conjointly administering osteogenic proteins/bone morphogenetic proteins morphogen and angiotensin-converting enzyme inhibitor to mammal.
                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 60; SEQ ID NO 3; 365pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             angiotensin converting enzyme inhibitor; ACE; angiotensin II receptor antagonist; AIRA; end stage renal disease chronic diabetic nephropathy; diabetine nephrosclerosis; diabetic renal hypertrophy; hypertensive nephrosclerosis; hypertensive glomerulosclerosis; chronic glomerulonephritis; hereditary nephritis; renal dysplasia; antidiabetic; nephrotropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB; ADK90642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Charette MF, Hruska KA, Mccartney J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-AUG-2002; 2002US-0406431P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-AUG-2003; 2003WO-US026923.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antiinflammatory; vasotropic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2004019876-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human osteogenic protein 1 morphogen SeqID 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              bone morphogenetic protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                human; chronic renal failure; renal disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADK90628 standard; protein; 431 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2004-282635/26.
386 INPETVPKPCCAPTQLNAIS 405
                                                                          20;
                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURIS INC.
UNIV WASHINGTON
                                    INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                    431 AA;
                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                          100.0%;
                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BMP; morphogen
                                                                                          Score 111;
Pred. No. 1
                                                                            Mismatches
                                                                                          DB 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  osteogenic
                                                                                                            Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein; OP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           disease; ESRD;
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RESULT 195

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                                                                                                                                            This sequence represents the prepro form of human bone morphogenic CC protein (BMP-7). This protein was used in the production of a device (D1) which involves contacting a solution (A) with a carrier (B) having a CC surface of metal or metal alloy to coat the surface with (B), and drying CC of the coated carrier. (A) comprises an osteoinductive protein. The CC process is carried out under a reduced concentration of oxygen CC (preferably less than 10 vol.*). The device may be used in the CC preparation of a pharmaceutical composition for osteo-integration and new CC bone formation in treatment of e.g. traumatic, malignant, artificial or CC contact, or for the treatment of hip, elbow, spine, knee, finger CC ankle joint. The method eliminates undesirable side effects such as CC inflammation due to the enhanced immunogenicity of oxidized proteins; is CC esset time-consuming and economical. The device manufactured by the present method is free of toxic substances. The device with the coating CC of osteo-inductive protein distributes the protein evenly and efficiently; initiates and stimulates the transformation of mesenchymal stem cells into osteoblasts, hence accelerates the bone formation.
                                                               Query Match
Best Local (
                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         human; bone morphogenic protein; BMP-2; metal alloy; osteo-inductive protein; osteo-integration; bone formation; trauma; malignancy; dental defect; hip; elbow; spine; knee; finger; ankle; inflammation; immunogenicity; transformation; mesenchymal stem cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Production of devices useful for e.g. new bone formation in dental defects, involves coating carrier having metal or metal alloy surface with osteo-inductive protein solution and drying under reduced oxygen
                                                                Similarity
INPETVPKPCCAPTQLNAIS 20
                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /label= Signal peptide
                                                               100.0%; Score 111; DB 8;
100.0%; Pred. No. 1.8e-06;
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                                                  Mismatches
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                                                                               Length
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386

INPETVPKPCCAPTQLNAIS 405

26-AUG-2004 ADO49073;

(first entry)

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RESULT 197
AD049073
ID AD0490
XX
AC AD0490
XX
DT 26-AUG
XX
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ADO36195
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                                                                                                                                                                                                      Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                     coordinates defining a portion of human transformation and differentiation factor-1 (hTDF-1). A processor communicates with the memory to generate a molecular model having a three-dimensional shape representing portion of hTDF-1. Also described is a morphogen analogue production method. The system is useful for designing, identifying and producing molecules which act as functional minetics of tissue morphogenic protein, TDF-1. The molecule is designed with enhanced solubility and stability under physiological condition. Also the biological activity of the hTDF-1 in mammal is enhanced. This is the amino acid sequence of human transformationand differentiation factor-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Computer system for producing tissue morphogenic protein analogs, has memory to store atomic X-ray crystallographic coordinates defining portion of human transformation and differentiation factor-1 (hTDF-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           morphogen analogue production; tissue morphogenic protein; tissue morphogenic protei mimetic; solubility; stability; protein co-ordinate data.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          memory stores atomic X-ray crystallographic coordinate; human; transformation and differentiation factor-1; TDF-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human transformation and differentiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADO36195 standard; protein; 431 AA
                                                                                                                                                                                                                                                               Sequence 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; SEQ ID NO 1; 82pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-439217/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Carlson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (CARL/) CARLSON W D. (KECK/) KECK P C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-NOV-2002; 2002US-00290554.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-NOV-2002; 2002US-00290554.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13-MAY-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2004093164-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-JUL-2004
                                                                         ADO49073
                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention
                                                                                                                                                                                                       20;
                                                                                                                                                                     1 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ğ
                                                                                                                                                                                                                     Similarity
                                                                         standard;
                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                 A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Keck PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                         describes memory stores atomic X-ray crystallographic
                                                                         protein; 431 AA
                                                                                                                                                                                                       100.0%; S
100.0%; P
tive 0;
                                                                                                                                                                                                         Score 111; DB 8;
Pred. No. 1.8e-06;
Mismatches 0;
                                                                                                                                                  405
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                                                                                                                                                                                                                                  Length 431;
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                                                                                                                                                                                                         Gaps
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genito-urinary disorder; renal failure); neurological disorder; dementia; Alzheimer's disease; endocrine disorder; hypothyroidism; vasotropic; arteriosclerotic; cytostatic; osteopathic; antiarthritic; antirheumatic; ophthalmological; auditory; respiratory; antidiabetic; nephrotropic; nootropic; neuroprotective; cell therapy; dedifferentiation factor; bone morphogenetic protein; BMP-7; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               osteoarthritis; osteoporosis; eye disorders; cataract; retinal degeneration; macular degeneration; ear degeneration; hearing loss; lung disorder; chronic obstructive pulmonary dicystic fibrosis; emphysema; metabolic disorder; diabetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dedifferentiation; mammalian cell; tissue regeneration; epimorphosis; G1 Cdk complex; drug screening; cardiovascular disease; atherosclerosis; coronary artery disease; obstructive vascular disease; myocardial infarction; cancer; joint disease; rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2004047747-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human dedifferentiation factor BMP-7, SEQ ID NO:28.
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disease;

21-NOV-2003; 2003WO-US037355 10-JUN-2004

22-NOV-2002; 2002US-00302812

(UTAH)

UNIV UTAH RES FOUND

Keating MT, Odelberg Ö

N-PSDB; ADO49072 WPI; 2004-441072/41

Dedifferentiating a differentiated mammalian cell comprises administering an agent that increases G1 Cdk complex or cell marker expression, promotes cell cycle reentry, or decreases differentiation marker

Disclosure; SEQ ID NO 28; 301pp; English.

CC method of regenerating mammalian tissues and/or organs by
CC dedifferentiation mammalian cells so that they become capable of
CC redifferentiation to regenerate the tissue and/or organ. A variety of
CC dedifferentiation factors may be used in the methods of the invention.
CC dedifferentiation factors may be used in the methods of the invention.
CC dedifferentiation organs or tissues; growth factors, such as members of the
CC of regenerating organs or tissues; growth factors, such as members of the
CC fibrolast growth factor (FGF) family of proteins, activated fibroblast
CC growth factor receptors (FGF) family of proteins, activated fibroblast
CC growth factor receptors (FGF) some morphogenetic proteins (BMPS); Wnt
CC family members, and other proteins that promote Wnt signalling such as
CC beta-catenin and Lefl/Tcf; the intracellular factors MSX1 and MSX2;
CC cyclinDl; cyclin-dependent kinase 4 (Cdk4); agents which promote FGF, BMP
CC or Wnt signalling; and inhibitors of MSX3, GSK3-beta, pl6, p21 or p27
CC expression or activity. The methods and compositions of the invention may
CC be used for dedifferentiating mammalian cells in vivo and in vitro. The
CC dedifferentiated cells can then be redifferentiated to regenerate desired
CC tissues and/or organs. Tissue regeneration is useful in the treatment of
CC cardiovascular diseases (e.g., atherosclerosis, coronary artery disease,
CC osteoarthritis, or osteoporosis); eye-related degeneration (e.g.,
CC catearacts, retinal and macular degeneration); cancers and
CC catearacts, retinal and macular degeneration); cancers and
CC catearacts, proteins or emphysema), metabolic disorders (e.g.,
CC diabetes); genito-urinary disorders (e.g., renal failure); neurological The invention relates to a method of dedifferentiating a differentiated mammalian cell. The method comprises administrating one or more agents which: (a) increases the expression and/or activity of a Gl Cdk complex; (b) decreases expression of one or more markers of differentiation; (c) promotes cell cycle reentry; or (d) increases the expression of one or more progenitor or stem cell markers. The invention also relates to a method of screening for dedifferentiation agents; the dedifferentiation method of screening for dedifferentiation agents; the dedifferentiation agents identified and pharmaceutical compositions containing them; and

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RESULT 198
ABB07965
ID ABB079
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                                       Matches
                                                   Query Match
Best Local
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Best Local
                                                                                                                                      The invention provides an osteogenesis stimulating fused protein (I) for a drug delivery system (DDS) of osteogenetic factor, having collagen avidity and polypeptides homologous to collagen avidity domain or its modified peptides (I) is used for stimulation of osteogenesis, a localizing agent and a slow releasing agent for a drug delivery system. The present sequence represents a human fibronectin collagen-binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           disorders (e.g., dementia or Alzheimer's disease); and endocrine disorders (e.g., hypothyroidism). With the exception of liver tissue, mammals are incapable of regenerating a tissue or organ following injury (a process known as epimorphosis, which occurs in aniamis such as newts, axolotls and teleost fish); instead, the missing tissue is replaced with non-functional scar tissue. The methods of the invention provide a means in which missing or damaged tissue can be replaced with functional tissue. The present sequence represents a protein which acts as a dedifferentiation factor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
Synthetic.
                                                                                             Sequence 473 AA;
                                                                                                                                                                                                                                           Disclosure;
                                                                                                                                                                                                                                                                         Novel osteogenesis stimulating fused protein having collagen avidity used as an osteogenesis stimulator and a localizing agent.
                                                                                                                                                                                                                                                                                                                      N-PSDB; ABL41028
                                                                                                                                                                                                                                                                                                                                    WPI; 2002-438612/47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Osteogenesis; fibronectin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human fibronectin collagen-binding domain/BMP7 hybrid protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABB07965;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABB07965 standard; protein; 473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 431 AA;
                                                                                                                         domain/human BMP7 hybrid protein
                                                                                                                                                                                                                                                                                                                                                                (TERU ) TERUMO CORP
                                                                                                                                                                                                                                                                                                                                                                                           16-AUG-2000; 2000JP-00246744.
                                                                                                                                                                                                                                                                                                                                                                                                                       16-AUG-2000; 2000JP-00246744.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-FEB-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JP2002058485-A.
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                                     20;
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                                                     Similarity
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INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                           Page 26-28; 30pp; Japanese.
                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; ilarity 100.0%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; drug delivery system; DDS; collagen; osteopathic; BMP7; hybrid; fusion protein.
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                                                 100
                                                   . 0%
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         20
                                                   Score 111; DB 9
Pred. No. 2e-06;
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Pred. No. 1.8e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 405
                                       Mismatches
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                                                                 ر.
د
                                       0
                                                               Length 473;
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                                       0
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                                       Gaps
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RESULT 199
ADRA447
AC ADRA647
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07-SEP-1990;
18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
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23-FEB-1989;
17-OCT-1989;
17-OCT-1989;
22-FEB-1990;
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01-JUL-2002
06-JUN-1994
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04-DEC-1990;
22-FEB-1991;
20-DEC-1991;
28-JAN-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR44751;
                                        The fusion protein encodes the entire prepro form of OPI (AAR44746) linked to a leader sequence (residues 1-53) suitable for promoting expression in E. coli. The protein when in association with a matrix can induce at the locus of an implant the full development cascade of endochondral bone formation including vascularisation, mineralisation and bone marrow differentiation. The osteogenic protein can also be used to repair both bone and cartilage in the treatment of osteoarthritis. (Updated on 01-JUL-2002 to add missing PA field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            vascularisation;
                                                                                                                                                                                                                                                                                                                     New pure mammalian osteogenic proteins - induce cartilage and endochondral bone formation when in association with a matrix.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kuberasampath
  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (STYC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRYKER
                                                                                                                                                                                                                                                                                                                                                                                     AAQ53147.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard;
       484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          fusion
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
(revised)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
1. .53
/label= Leader sequence.
61. .316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89US-00422699
90US-00483913
90US-00569920
90US-00579865
90US-00500024
90US-00616374
90US-0062188
90US-00621988
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88US-00232630.
89US-00315342.
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92US-00827052
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Score 111; DB 2; Pred. No. 2e-06;

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01-JUL-2002
09-JUN-1995
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18-OCT-1990;
18-OCT-1990;
21-NOV-1990;
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04-DEC-1990;
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Peptide
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17-OCT-1989;
17-OCT-1989;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-APR-1988;
15-AUG-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
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AAQ72713 encodes AAR51657 the osteogenic fusion protein 1C (OP1C) which includes a MLE leader sequence suitable for promoting expression in E. coli. Fragments of the osteogenic unglycosylated polypeptides produced can be disulphide bonded to form dimers, which form an essential component of an osteogenic protein. This protein is dispersed in a biodegradable matrix which can be implanted into a mammalian bone marrow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US5354557-A
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                                                                                                                                                       Disclosure; Col 105-108; 128pp; English
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N-PSDB; AAQ72713.
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20-DEC-1991
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20-AUG-1990;
                                                                                                                                                                                                      Implantable device for inducing osteogenesis contg. non-glycosylated dimeric, di:sulphide
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US-08-621-803-253
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US-08-441-846-11
US-08-447-700-11
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US-08-148-925C-15
US-08-447-970-15
US-08-447-970-17
US-08-449-970-17
US-08-449-970-2
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US-08-480-111-2
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                   255, Appl 263, A
Sequence 47, Application US/08
Patent No. 5693779
GENERAL INFORMATION:
APPLICANT: Moos Jr., Malco
APPLICANT: Wang, Shouwan
APPLICANT: Krinks, Marie
TITLE OF INVENTION: PRODUC
                                                                                                                          RESULT 2
US-08-335-583C-47
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US-09-439-779B-11
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Best Local S
Matches 20
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Patent No. 6617307
                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 20
TYPE: PRT
ORGANISM: Artificial S
FEATURE:
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PCT-US93-07189-2 PCT-US93-07319-17 PCT-US93-07321-17 PCT-US93-08408-17 PCT-US93-08408-17 PCT-US93-08408-17 PCT-US93-08408-17 PCT-US93-08408-17 PCT-US93-08408-17 PCT-US95-05471-4 PCT-US93-0841-4 PCT-US93-08441-4 PCT-US93-05448-1 US-08-449-0598-1 US-08-449-0598-1 US-08-449-0598-1 US-08-449-0598-1 US-08-449-0598-1 US-08-449-0598-1 US-08-449-0598-1 US-08-449-0598-1 US-08-449-0598-1 US-08-453-5638-6 US-08-453-5638-6 US-08-451-9538-6 US-08-451-9538-6 US-08-445-4588-6 ALIGNMENTS Sequence Sequence Sequence eduance con construction of the control of the cont Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence 2, Appli 17, Appli 17, Appli 17, Appli 17, Appli 17, Appli 17, Appli 2, Appli 2, Appli 3, Appli 3, Appli 3, Appli 3, Appli 13, Appli 16, Appli 17, Appli 17,

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APPLICANT: Kyocera Corporation
APPLICANT: Nishimura, Yoshihiko
APPLICANT: Suzuki, Yoshihiko
APPLICANT: Tanihara, Masao
TITLE OF INVENTION: A Peptide and Osteogenetic Accelerator
FILE REPERENCE: 81918-0001
CURRENT APPLICATION UMMBER: US/09/439,779B
CURRENT FILING DATE: 2001-09-10
NUMBER OF SEQ ID NOS: 11
SOFTWARE: Patentin version 3.1
SEQ ID NO 11
LENGTH: 20
                                                                                                                                                                                                                                                                                                    Score 111; DB 4;
Pred. No. 1.1e-08;
Mismatches 0;
OF
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ANTI-SENSE: NO FRAGMENT TYPE: (
ORIGINAL SOURCE: US-08-335-583C-47
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---- Local Similarity
Conserv
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Patent No.
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                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: H tten
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: NII
TELECOMMUNICATION INFORMATION:
TELEPHONE: 714-760-0404
TELEFAX: 714-760-9502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Diskett
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            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
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CURRENT APPLICATION DATA:
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                                                                                                                                                          NUMBER OF SEQUENCES: 4
                                                                                                                                                                             NPPLICANT: Neidhardt, Helge
NPPLICANT: Paulista, Michael
PITLE OF INVENTION: NEW GROWTH/DIFFERENTIATING FACTOR OF
PITLE OF INVENTION: THE TGF- FAMILY
TUMBER OF SEQUENCES: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Knobbe, Martens, Olson and Bear STREET: 620 Newport Center Drive 16th Floor CITY: Newport Beach
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM CONTROL OPERATING SYSTEM:
                                                                                            STREET: 655
CITY: Washington
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TYPE: amino acids
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                                                            COUNTRY: U.S.A. ZIP: 20005-5701
OPERATING SYSTEM:
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5994094
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                                                                                                                           E: Nikaido, Marmelstein, Murray & Oram LLP 655 Fifteenth Street N.W. Suite 330
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COMPATIBLE
PC-DOS/MS-DOS
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US-08-288-508C-18
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                               APPLICATION NUMBER: US/08/478
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
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APPLICATION NUMBER: I
FILING DATE: 10-AUG-
PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
COMPUTER: ISM Commpatible
COMPUTER: ISM Commpatible
CORRATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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ATTORNEY/AGENT INFORMATION:
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FILING DATE: 25-MAY-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: DE P
         REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-080
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: SMART, JOHN
TITLE OF INVENTION: SINGLE-CHAIN ANALOGS OF TGF-B
TITLE OF INVENTION: SUPERFAMILY (MORPHONS)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
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COUNTRY:
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                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: PATENT ADMINISTRATOR; TESTA, HURWITZ ADDRESSEE: THIBEAULT, LLP STREET: 125 HIGH STREET
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                          CITY: BOSTON
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ELEPHONE:
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USA
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617-248-7000
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617-248-71

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US-08-289-222E-27
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INFORMATION FOR SEQ ID NO: 27:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                       REGISTRATION NUMBER: 36,105
REFERENCE/DOCKET NUMBER: P564-9021
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                        PRIOR AFFILIATION NUMBER: EPO YZIVAZZZI FILING DATE: (12-FEB-1992 PRIOR AFFILICATION DATA: PCT/EP93/00350
                                                                                                                                                                                                                                                                                               CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289,222
FILING DATE: 12-AUG-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: DE P 44 23 190.3
                                                                                                                             APPLICATION NUMBER: PCT/E
FILING DATE: 12-FEB-1993
ATTORNEY/AGENT INFORMATION:
NAME: KITTS, MONICA CHIN
                                                                                                                                                                                                                                                            FILING DATE: 07-JUL-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:

ADDRESSEE: NIKADO, MARMELSTEIN, MURRAY & ORAM
STREET: 655 FIFTEENTH STREET, N. W., G STREET LOBBY,
STREET: SUITE 330
CITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 102 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: POHL, JENS
TITLE OF INVENTION: GROWTH/
TITLE OF INVENTION: FAMILY
NUMBER OF SEQUENCES: 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: HOTTEN, GERTRUD
APPLICANT: NEIDHARDT, HEIGH
APPLICANT: BECHTOLD, ROLF
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/0
FILING DATE: 25-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 1..102
OTHER INFORMATION: /note= "OP-1 SEQUENCE"
                                                     TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 20005-5701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: Protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  57 INPETVPKPCCAPTQLNAIS 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20; Conservative
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                                       202/638-4810
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                                                       202/638-5000
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Pred. No. 5.5e-08;
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; MOLECULE TYPE: US-09-054-526B-27
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; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-289-222E-27
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US-09-054-526B-27
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Query Match
Best Local Similarity
Matches 20; Conser
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COMPUTER: IBM PC. COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOSTWARE: PACEDOS/MS-DOS
SOSTWARE: PACEDOS/MS-DOS
SOSTWARE: PC-DOS/MS-DOS
SOSTWARE: PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/054,526B
FILING DATE: 03-NPR-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: DE P4423190.3
FILING DATE: 12-NDG-1994
PRIOR APPLICATION NUMBER: DE P4423190.3
FILING DATE: 01-UTL-1994
PRIOR APPLICATION NUMBER: EPO 92102324.8
FILING DATE: 12-FSB-1992
PRIOR APPLICATION NUMBER: PCT/EP93/00350
FILING DATE: 12-FSB-1993
PRIOR APPLICATION NUMBER: PCT/EP93/00350
FILING DATE: 12-FSB-1993
ATTORNEY/AGENT INFORMATION:
NAME: KITTS, MONICA CHIN
REGISTRATION NUMBER: P564-8005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent No. 6197550
GENERAL INFORMATION:
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Best Local Similarity 100
Matches 20; Conservative
                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: USA
ZIP: 20005-5701
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION: TELEPHONE: 202/638-5000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS: ADDRESSEE: NIKAIDO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: H TTEN,
APPLICANT: NEIDHAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: DNA SEQUENCES ENCODING NOVEL TITLE OF INVENTION: GROWTH/DIFFERENTATION FACTORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 655 FIFTEENTH STREET, N. W., G STREET LOBBY, STREET: SUITE 330 CITY: MASHINGTON
                                                                                                                  TOPOLOGY:
                                                                                                                                    STRANDEDNESS
                                                                                                                                                                                                                                               TELEPHONE:
                                                                                                                                                                       ENGTH:
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                                                                                                                                                    amino acid
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                                                                                                                                                                       102 amino acids
                                                                                                                                                                                                                              202/638-4810
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BECHTOLD, ROLF
       100.0%; Score 111; DB 3;
larity 100.0%; Pred. No. 5.5e-08;
Conservative 0; Mismatches 0;
                                                                                                                    linear
                                                                                             protein
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Pred. No. 5.5e-08;
                                        Length 102;
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RESULT 7
US-08-931-858E-161
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US-08-981-739-161
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                                                                                                        Sequence 161, Application US/08
Patent No. 6222449
GENERAL INFORMATION:
APPLICANT: JOHNSON JR.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 161, Application US/08931858E Patent No. 6222022
                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 314-727-6092
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: HOLLAND, DONALD R.
REGISTRATION NUMBER: 35,197
REFERENCE/DOCKET NUMBER: 97:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: HOWELL & HAFERKAMP, L.C.
STREET: 7733 FORSYTH BOULEVARD, SUITE 1400
                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: DESAUVAGE, FRED
TITLE OF INVENTION: PERSEPHIN AND RELATED GROWTH FACTOR
WIMBER OF SEQUENCES: 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 77
CITY: ST.
STATE: MO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ENGTH:
                         LAMPE, PATRICIA A.
TITLE OF INVENTION: PERSEPHIN AND RELATED GROWTH FACTORS NUMBER OF SEQUENCES: 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION
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                                                                                                                                                                                                                                                                                                                                                                                                                                     amino acid
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KOTZBAUER, PAUL T
LAMPE, PATRICIA A
                                                                                                                                                                                                                                                                                                                                                                                                                                                    102 amino acids
                                                                                                                                                          Application US/08981739
                                                                                                                                                                                                                                                                                                                                                                                                  ESS: single
linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOUIS
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                                                                             MILBRANDT, JEFFREY D. KOTZBAUER, PAUL T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ROBERT
HOWELL & HAFERKAMP, L.C
                                                                                                                                                                                                                                                                                                                       100.0%;
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                                                                                                               EUGENE M.
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Pred. No. 5.5e-08;
; Mismatches 0;
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Best Local S
     CLASSIFICATION:
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TOPOLOGY: linear

MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 161:
US-08-981-739-161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 9
US-08-786~284A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 161: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                  APPLICANT: CARLSON,
APPLICANT: RUEGER, I
APPLICANT: RUEGER, I
APPLICANT: SAMPATH,
TITLE OF INVENTION:
TITLE OF INVENTION:
              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IRM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATION GOSTEM: 30.005/MS-DOS
OPERATION DATA:
OPERATION NUMBER: US/08/981,739
FILING DATE: 31-Aug-1998
FILING DATE: 31-Aug-1998
CLASSIFICATION: <Unknown>
PRIOR APPLICATION UNMBER: PCT/US97/03461
PILING DATE: <Unknown>
APPLICATION UNMBER: PCT/US97/03461
PILING DATE: <Unknown>
ATTORNEY/ACENT INFORMATION:
NAME: USF NAME OF THE OPERATION DATE: OPERATION:
                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                             STREET: 45 SOUTH
APPLICATION NUMBER:
                                                                                                                                      COUNTRY: US
ZIP: 01748
                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: HOLLAND, DONALD R.
REGISTRATION NUMBER: 35,197
REFERENCE/DOCKET NUMBER: 976
TELECOMMUNICATION INFORMATION:
TELEPHONE: (314) 727-5188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/08786284A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 102 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CELEFAX: (314)
                                                                                                                                                                                                                       45 SOUTH STREET
                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                              GRIFFITH, DIANA L
CARLSON, WILLIAM D
RUEGER, DAVID C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 111; DB 3; ilarity 100.0%; Pred. No. 5.5e-08; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                             SAMPATH, KUBER T
                                                                                                                                                                                                                                          INC
                                                                                                                                                                                                                                                           PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES,
                                                                                                                                                                                                                                                                                                                                                                                                                                              PETER
                                                                                                                                                                                                                                                                                                                       MORPHOGEN ANALOGS
  US/08/786,284A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      727-6092
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                                                                                                                                                                                                                                                                                                                                            AND COMPOSITIONS FOR PRODUCING
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                                   US-09-128-026-161
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US-09-128-026-161
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Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local (
                                                                                                                                                 TELEFAX: (314) 727-609
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (508) 435-0992
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                 NAME: HOLLAND, DONALD R.
REGISTRATION NUMBER: 35,197
REFERENCE/DOCKET NUMBER: 97/
TELECOMMUNICATION INFORMATION:
TELEPHONE: (314) 727-5188
                                                                                                                                                                                                                                                                                                   ZIP: 63105-1817
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/09/128,026
FILING DATE:
                                                 TOPOLOGY: 13
                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: KOTZBAUER, PAUL
APPLICANT: LAMPE, PATRICIA
TITLE OF INVENTION: PERSEP
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TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: JOHNSON JR., EUGENE M
APPLICANT: MILBRANDT, JEFFREY D.
APPLICANT: KOTZBAUER, PAUL T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                              STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: ST. LOUIS
STATE: MISSOURI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: 1..102
OTHER INFORMATION: /product= "hOP-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET:
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REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
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                                                                                                                   ENGTH:
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o. 6403335
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20; Conserv
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                                                                                                     amino acid
                                                                                                                 102 amino acids
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7733 FORSYTH BOULEVARD, SUITE 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                102 amino acids
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linear
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                                                                                                                                            4) /_
727-6092
70: 161:
                                                                                 single
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100.0%; Pred. No. 5.5e-08;
tive 0; Mismatches 0;
 100.0%;
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   Score 111;
 DB 4;
 Length 102;
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RESULT 12
US-09-220-616-161
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US-09-496-398-16
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Sequence 161, Application US/09220616 Patent No. 6645937 GENERAL INFORMATION:
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                                                                                                                                                                                                                                 Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Vei
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/496,398
FILING DATE:
CLASSIFICATION DATA:
APPLICATION NUMBER: US 08/478,097
FILING DATE: 07-JUN-1995
CLASSIFICATION:
APPLICATION NUMBER: 27,829
REGISTRATION NUMBER: 27,829
REGISTRATION NUMBER: STK-059CN
REFERENCE/DOCKET NUMBER: STK-059CN
                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 617-248-7100
INFORMATION FOR SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: KECK, PETER
APPLICANT: SMART, JOHN
TITLE OF INVENTION: SINV
TITLE OF INVENTION: SUPPLICANTED OF SEQUENCES: 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: 617-248-7000
                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR; TESTA, HURWITZ &
ADDRESSEE: THIBEAULT, LLP
                                                                                                                                                                                                                                                                                  NAME/KEY: Protein
LOCATION: 1..102
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
STRANDEDNESS: sir
TOPOLOGY: linear
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ZIP: 02110
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET:
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                                                                                                                              57
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                                                                                                                                                                                                l Similarity
20; Conserv
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                                                                                                                                                                                                                 100.0%; Score 111; DB 4; 100.0%; Pred. No. 5.5e-08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SINGLE CHAIN ANALOGS OF TGF-B SUPERFAMILY (MORPHONS)
                                                                                                                                                                                                                                                                                        /note= "OP-1 SEQUENCE"
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; Mismatches 0;
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                                                                                                                                                                                                                                   Length 102;
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RESULT 13
US-09-374-958C-55
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local :
                                                                                                                      CURRENT APPLICATION NUMBER: US/09/374,958C
CURRENT FILING DATE: 1999-08-16
NUMBER OF SEQ ID NOS: 90
SOFTWARE: Patentin version 2.0
SEQ ID NO 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/09/220,616
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/981,739
FILING DATE: 31-Aug-1998
APPLICATION NUMBER: PCT/US97/03461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: US
ZIP: 63105-1817

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, ve
CURRENT APPLICATION DATA;
                OTHER INFORMATION: OP-1-09-374-958C-55
                                                                                                                                                                                                                      TITLE OF INVENTION: Modified Proteins and DNAs of the TGF-beta Superfamily, Including TITLE OF INVENTION: Modified Morphogenic Proteins FILE REFERENCE: STK-076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 97
TELECOMMUNICATION INFORMATION:
TELEPHAN: (314) 727-5188
TELEFAX: (314) 727-6092
INFORMATION FOR SEQ ID NO: 161:
                                                                                                                                                                                                                                                                              APPLICANT: Stryker Corporation
                                                            LENGTH: 102
TYPE: PRT
ORGANISM: Homo sapiens
                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
ATTORNEY AGENT INFORMATION:
NAME: HOLLAND, DONALD R.
REGISTRATION NUMBER: 35,197
REGISTRATION NUMBER: 976163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: LAMPE, PATRICIA A.
TITLE OF INVENTION: PERSEPHIN AND RELATED GROWTH FACTORS
NUMBER OF SEQUENCES: 176
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: 1i MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
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STREET: 7733 FORSYTH BOULEVARD, SUITE 1400
CITY: ST. LOUIS
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MILBRANDT, JEFFREY D.
KOTZBAUER, PAUL T.
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Pred. No. !
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                                                                    RESULT 15
US-09-220-407-161
                  Sequence 161, Application US/09220407 Patent No. 6716600 GENERAL INFORMATION:
APPLICANT:
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TOPOLOGY: Inear;

MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 161:
US-09-220-527-161
                                                  Query Match
Best Local Similarity
Tatches 20; Conserve
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GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO: 161: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/981,739

PILING DATE: 31-Aug-1998

APPLICATION NUMBER: PCT/US97/03461

PILING DATE: «Unknown»

ATTORNBY/AGENT INFORMATION:

NAME: HOLLAND, DONALD R.

REGISTRATION NUMBER: 35,197

REGISTRATION INFORMATION:

TELEPHONE: (314) 727-5188

TELEPHONE: (314) 727-6992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/220,527
FILING DATE: 24-Dec-1998
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 63105-1817
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LAMPE, PATRICIA A.
TITLE OF INVENTION: PERSEPHIN AND RELATED GROWTH FACTORS
57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            57 INPETVEKECCAPTOLNAIS 76
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 INPETVPKPCCAPTQLNAIS 20
                                 1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: HOWELL & HAFERKAMP, L.C.
STREET: 7733 FORSYTH BOULEVARD, SUITE 1400
CITY: ST. LOUIS
STATE: MISSOURI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                      TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: US
                                                                                                                                                                                                                 STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/09220527
                                                                  100.0%; Silarity 100.0%; For Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MILBRANDT, JEFFREY D.
KOTZBAUER, PAUL T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 111; DB 4; 100.0%; Pred. No. 5.5e-08; o; Mismatches 0;
                                                                    Score 111; DB 4;
Pred. No. 5.5e-08;
76
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                                                                                                         Length 102;
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JOHNSON, EUGENE M

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US-09-386-450D-18
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US-09-220-407-161
                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                     Sequence 18, Application US/09386450D Patent No. 6764994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
        PRIOR APPLICATION NUMBER: US 08/288,508
PRIOR FILING DATE: 1994-08-10
PRIOR APPLICATION NUMBER: DE P 43 26 829.3
PRIOR FILING DATE: 1993-08-10
PRIOR APPLICATION NUMBER: DE P 44 18 222.8
PRIOR FILING DATE: 1994-05-25
PRIOR APPLICATION NUMBER: DE P 44 20 157.5
PRIOR FILING DATE: 1994-06-09
PRIOR FILING DATE: 1994-06-09
                                                                                                                                                                                                              APPLICANT: Hotten, Gertrud
APPLICANT: Neithardt, Helge
APPLICANT: Paulista, Michael
TITLE OF INVENTION: NEW GROWTH/DIFFERENTIATING FACTOR OF TGF-? Family
FILE REFERENCE: 100564-09022
                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/386,450D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO: 161: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: HOLLAND, DONALD R.
REGISTRATION NUMBER: 35,197
REFERENCE/DOCKET NUMBER: 9714
TELECOMMUNICATION INFORMATION:
TELEPHONE: 314-727-5188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/931,858
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: HOWELL & HAFERKAMP, L.C.
STREET: 7733 FORSYTH BOULEVARD, SUITE 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: DESAUVAGE, FRED
TITLE OF INVENTION: PERSEPHIN AND RELATED GROWTH
NUMBER OF SEQUENCES: 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/09/220,407 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: ST. LOUIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             57
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SEQ ID NOS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LAMPE, PATRICIA A KLEIN, ROBERT
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Pred. No. 5.
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RESULT 18
US-09-374-958C-69
; Sequence 69, Application US/09374958C
; Patent No. 6677432
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US-07-764-731B-8
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                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC COMPATIBLE
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/764,731B
FILING DATE: 19910924
CLASSIFICATION: 435
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: KADINOS, Ellen J.
REGISTRATION NUMBER: 32,245
REFERENCE/DOCKET NUMBER: GI5159B
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-876-1170
TTTLEPHONE: 617-876-1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 8, App....
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LENGTH: 102
                                                                                                                                                                    Matches
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Best Local Similarity
                                                                                                                                                                                                  Query Match
                                                                                                                                                                                   Best Local
                                                                                                                                                                                                                                                                                                             TELEFAX: 617-876-5851
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Rosen, Vicki A.
APPLICANT: Wang, Elizabeth A.
APPLICANT: Wozney, John M.
APPLICANT: Wozney, John M.
TITLE OF INVENTION: Methods f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY: DOMAIN
LOCATION: (1)..(1
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ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Legal Affairs, Genetics Institute, Inc.
STREET: 87 CambridgePark Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY:
STATE:
                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: U.ZIP: 02140
                                                                                                                                                                                                                                                                                                   LENGTH:
                                                                                                    59
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                                                                                                                                                                  L Similarity
20; Conserv
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                                                                                                                    INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                   : 104 amino acids
AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INPETVPKPCCAPTQLNAIS 20
                                                                                                    INPETVPKPCCAPTQLNAIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                    100.0%; llarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                      linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Methods for Producing BMP-7 Proteins
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                                                                                                                                                                                   Score 111; DB 1;
Pred. No. 5.6e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 111; DB 4;
Pred. No. 5.5e-08;
                                                                                                    78
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                                                                                                                                                                     Mismatches
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                                                                                                                                                                                                  Length 104;
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Query Match
Best Local Similarity 100.
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SEQ ID NO 69
SENGTH: 117
TYPE: PRT
ORGANISM: Homo sapiens
NAME/KEY;
LOCATION;
S-08-481-377-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 12,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -08-481-377-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: STK-076
CURRENT APPLICATION NUMBER: US/09/374,958C
CURRENT FILING DATE: 1999-08-16
NUMBER OF SEQ ID NOS: 90
                                                                                                                                                                               TELEFAX: (619) 455-5110 INFORMATION FOR SEQ ID NO: 3 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                            APPLICATION NUMBER: PCT/US94/
FILING DATE: 12-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., J
REGISTRATION NUMBER: FD22
REFERENCE/DOCKET NUMBER: FD22
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PPLICANT: Stryker Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Trypsin truncated H2223 mutant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ITLE OF INVENTION: Modified Proteins and DNAs of the TGF-beta Superfamily, Including TLE OF INVENTION: Modified Morphogenic Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 1800 CITY: LOS ANGELES CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 514
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                   SOPTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/481,377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM FC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEB: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: JOHNS F
                                                              CLONE: OP-1
                                                                              DIECULE TYPE: proto
MEDIATE ()
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                                                                                                                                                               ENGTH:
                                                                                                                               YPE: amino acid
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                                                                                                                                                                 118 amino acids
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JENTION: GROWTH DIFFERENTIATION FACTOR-3
              Protein
1..118
                                                                                              protein
                                                                                                                               single
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100.0%; Pred. No. 6.3e-08;
tive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                       FD2279 PCT
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US-08-491-835-10
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Best Local &
Matches 20
                                                                  US-09-153-733A-12
                                                                                                                                                                                                 Query Match
Best Local S
Matches 20
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CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/US

APPLICATION NUMBER: PCT/US

APPLICATION NUMBER: PCT/US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (619) 455-5110 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  atent No. 5821056
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC COMPAT
OPERATING SYSTEM: PC-DO
SOFTWARE: Patentin Rela
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: FD TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 12-JAN-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
NERAL INFORMATION APPLICANT: JOHNS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                        IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                       NAME/KEY:
                                                                                                                                                                                                                                                                                                                                       CLONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Wetherell, Jr. Ph.D., REGISTRATION NUMBER: 31,678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/0 FILING DATE: 23-OCT-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                         COPOLOGY: 1
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                                  No.
                                                                                                                                                                                                                                                                                                                                                                                                        RANDEDNESS:
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                                                                                                                                    73 INPETVPKPCCAPTQLNAIS 92
                                                                                                                                                                 1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                 h 100.0%; similarity 100.0%; 20; Conservative 0;
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                                                Application US/09153733A
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1..118
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 JOHNS HOPKINS UNIVERSITY
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SYSTEM: PC-DOS/MS-DOS
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E: Spensley Horn Jubas & Lubitz
1880 Century Park East, Suite 500
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Score 111; I
Pred. No. 6.3
0; Mismatches
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Pred. No. 6.3e-08;
                                                                                                                                                                                                                                                                   John R
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.3e-08;
                       DB
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                     Length 118;
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Gaps
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RESULT 22
US-08-946-092A-10
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Matches
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                                                                                                                                                                                                                                                                                                                                               sequence
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                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FORM
COMPUTER: IBM FORM
COMPUTER: PROPAGE
COPPARING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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IMMEDIATE SOURCE:
CLONE: OP-1
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ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: WETHERELL, JR. Ph.D.,
REGISTRATION NUMBER: 31.678
REFERENCE/DOCKET NUMBER: FD.
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                       APPLICANT: THE JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: NUMBER OF SEQUENCES:
                                                                                                                                                 STREET: 1880 Century Park East, Suite 500 CITY: Los Angeles STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: Protein LOCATION: 1..118
APPLICATION NUMBER: US/08/946,092A
                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/09/153,733A
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5. 6030617
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29
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RESULT 23
US-09-172-062-10
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
TELEFAX: (619) 455-5110 INFORMATION FOR SEQ ID NO: 1 SEQUENCE CHARACTERISTICS:
                                                                                                                             CLASSIFICATION:
PRIOR APPLICATION UNMBER: US/08/
APPLICATION NUMBER: US/08/
FILING DATE: 23-OCT-1995
APPLICATION NUMBER: PCT/US
FILING DATE: 12-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Wathors11 IT DE N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (619) 455-5110 INFORMATION FOR SEQ ID NO: :
                                              NAME: Wetherell, Jr. Ph.D.,
REGISTRATION NUMBER: 31.678
REFERENCE/DOCKET NUMBER: FD
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                        ZIP: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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CLONE: OP-1
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                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
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                                                                                                                                                                                                                                                                                                                                        COMPUTER:
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                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Los Angeles
STATE: California
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Similarity 100.0%;
20; Conservative 0
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1880 Century Park East, Suite 500
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                                                                                      FD3288
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Pred. No. 6.3e-08;
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Gaps

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73

US-09-172-062-10

LOCATION: NAME/KEY:

Protein 1..118

MOLECULE TYPE: protein IMMEDIATE SOURCE: CLONE: OP-1

IOPOLOGY: STRANDEDNESS:

linear single

Matches Query Match

20;

Local Similarity

US-09-301-520D-10

GENERAL INFORMATION: Sequence 10, App. No. 636540

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FILE REFERENCE: JHU1190-3
CURRENT APPLICATION NUMBER: US/09/301,520D
CURRENT FILING DATE: 1999-04-28
PRIOR APPLICATION NUMBER: US 09/172,062
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR FILING DATE: 1995-10-23
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR FILING DATE: 1994-01-12
PRIOR FILING DATE: 1993-01-12
                                                                                                                                                                                        Sequence 12, Application US/09389705
Patent No. 6391565
GENERAL INFORMATION:
APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.0 SEQ ID NO 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: LEE, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE APPLICANT: LEE, Se-Jin
    ZIP: 90067
COMPUTER READABLE FORM:
                                                                                                                                                                          TUMBER OF SEQUENCES: 29
                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
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Similarity 100.0%;
20; Conservative 0
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                                                                     STATE: CALIFORNIA
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Pred. No. 6.3e-08;
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COMPUTER: IBM FC COMPACTIBLE
COPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/00666
FILING DATE: 12-OAN-1994
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD2279 PCT
TELECONCUNICATION INFORMATION:
TELEPHONE: (619) 455-5110
INFORMATION FOR SEQ ID NO: 12:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 12, Applicat GENERAL INFORMATION:
APPLICANT: JOHNS
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                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR CITY: LOS ANGELES STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/389,705
FILING DATE: 03-Sep-1999
CLASSIFICATION: -Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/153,733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD2279 PCT
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear MOLECULE TYPE: proteil IMMEDIATE SOURCE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCATION: 1..118
SEQUENCE DESCRIPTION: SEQ ID NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73 INPETVPKPCCAPTQLNAIS 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (619) 455-5110
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application PC/TUS9400666
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                                                                                                                                                                                                                                                                                                                              Floppy disk
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Pred. No. 6.3e-08;
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Gaps

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US-09-389-705-12

COUNTRY: US

RESULT 25

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Matches Query Match Best Local

20;

) ORGANISM: Homo sapiens

ENGTH:

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                                                              Query Match
Best Local S
Matches 20
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APPLICANT: THE JOHN
TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                              TELEFAX: (619) 455-5110 INFORMATION FOR SEQ ID NO: 1
                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Wetherell, Jr. Ph.D., C.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD33
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -US94-00685-10
                                                                                                                                                                                             STRANDEDNESS: STRANDEDNESS: STRANDEDVIST: 1inea MOLECULE TYPE: pr
IMMEDIATE SOURCE:
CLONE: OP-1
                                                                                                                                           FEATURE:
NAME/KEY: Protein
LOCATION: 1..118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IMMEDIATE SOURCE:
CLONE: OP-1
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LENGTH: 118 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
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MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: PCT/
FILING DATE: 12-JAN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
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   73
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                                                              l Similarity
20; Conserv
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Similarity 100.0%;
20, Conservative (
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   INPETVPKPCCAPTQLNAIS 92
                                                                                                                                                                                                                                                                               amino acid
                                 INPETVEKECCAPTQLNAIS 20
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1880 Century Park East, Suite 500
                                                                                                                                                                                                                                                                                             118 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             THE JOHNS HOPKINS UNIVERSITY VENTION: GROWTH DIFFERENTIATION FACTOR-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                              100.0%; Score 111; DB 5; llarity 100.0%; Pred. No. 6.3e-08; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein
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Pred. No. 6.3e-08;
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US-08-455-559-18
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US-08-581-529B-12
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                                                                                                                                                                                     Sequence 18, Application US/08455559
Patent No. 5801014
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (619) 678-509
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 119 amino acid
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ATTORNEY/AGENT INFORMATION:
NAME: Lisa A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION UNMBER: U5/08/581,52:
FILING DATE: 15-APR-1996
                                                                                                                   APPLICANT: LEE, SE-JIN
APPLICANT: HUYNH, THANH
TITLE OF INVENTION: GROW
NUMBER OF SEQUENCES: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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CLONE: OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION: TELEPHONE: (619) 678-5070
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CORRESPONDENCE ADDRESS:
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APPLICANT: Huynh, Thanh
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                       ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
STATE: CALIFORNIA
COINTPY. ""
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 100.0%;
es 20; Conservative
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COUNTRY: US
                                                                                                                                                                                                                                                                                                                 74 INPETVEKECCAPTOLNAIS 93
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1..119
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                                                                                                                                       GROWTH DIFFERENTIATION FACTOR-5
                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 111; DB 1; 100.0%; Pred. No. 6.4e-08;
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FILING DATE: 31-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNDER: US 08/003,144
FILING DATE: 12-JAN-1993
ATTORNEY AGENT INFORMATION:
NAME: WETHERELL, JR. PH.D., JOHN R.
REGISTRATION UNDBER: 31,678
REFERENCE/DOCKET NUMBER: PD2280

SOFTWARE: PatentIn Release #1.0, Version #1.25

US/08/455,559

APPLICATION NUMBER:

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy

MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS

TELEPHONE: 619/455-5100
TELEPAX: 619-455-5110
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 119 amino acids

0

TELECOMMUNICATION INFORMATION:

MOLECULE TYPE:

linear protein single

TYPE: amino acid STRANDEDNESS: sir

CLONE: OP-1

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US-08-525-596B-22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                                                         CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/089,670
FILING DATE: 09-JUL-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Lisa A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
REGISTRATION NUMBER: 38,347
                                                                                                                            TELEFAX: 619/678-5099
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 119 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 119 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    atent No. 5986058
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 07
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619/678-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
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CLONE: OP-1
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                                             TOPOLOGY: line MOLECULE TYPE: p IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Lee, Se-Jin
APPLICANT: Huynh, Thanh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: Protein LOCATION: 1..119
                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/581,528A
FILING DATE: 03-Sept-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 119 amino acids TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER:
NAME/KEY: Protein
                                                                                              STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        74 INPETVPKPCCAPTQLNAIS 93
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                                                                                                              amino acids
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4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              USA
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100.0%; P
ative 0;
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                                                                                                                                                                    12:
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Pred. No. 6.4e-08;
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RESULT 30 US-08-525-596B-22

Sequence 22, Application US/08525596B Patent No. 5827733

GENERAL INFORMATION:
APPLICANT: Huynh, Thanh
APPLICANT: Lee, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
NUMBER OF SEQUENCES: 32

CIL.
STATE:
STATE:
COUNTRY: US
COUNTRY: 92037

E: Fish & Richardson P.C.
4225 Executive Square, Suite 1400

CORRESPONDENCE ADDRESS:

OPERATING SYSTEM: Windows95
SOFTWARE: FASTSEQ for Windows Version 2.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/5~
FILING DATE: 19-5~
CLASSIFF~~

CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION UNMBER: PCT/US94/07762
PILING DATE: 08-UUL-1994
ATTORNEY/AGENT INFORMATION:

NAME: Wetherell, Jr., Ph.D, REGISTRATION NUMBER: 31,678

US-08-455-559-18

NAME/KEY:

LOCATION:

Protein 1..119

Matches

20;

Conservative

0

Mismatches

Query Match Best Local Similarity

100.0%; Score 111; DB 1; 100.0%; Pred. No. 6.4e-08;

Length 119; Indels

1..119

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RESULT 33
US-09-177-860A-22
; Sequence 22, Application US/09177860A
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US-09-097-616-12
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US-09-097-616-12
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APPLICANT: Lee, Se-Jin
APPLICANT: Huynh, Thanh
TITLE OF INVENTION: GRC
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
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                                                                                                                                             Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (619) 678-5099
INFORMATION FOR SEQ ID NO: 12:
                                                                                                                                                                                                                                                                  TOPOLOGY: linea MOLECULE TYPE: pr IMMEDIATE SOURCE: CLONE: OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 0 FILING DATE: 15-APR-1996 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/097,616
                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Lisa A. Haile, Ph.D. REGISTRATION NUMBER: 38,347 REFERENCE/DOCKET NUMBER: 07
                                                                                                                                                                                                                                        NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
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                                                                               74 INPETVPKPCCAPTQLNAIS 93
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: California
                                                                                                           INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                             : 119 amino acids
amino acid
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4225 Executive Square, Suite 1400
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                                                                                                                                             Score 111; DB 3;
Pred. No. 6.4e-08;
; Mismatches 0;
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US-08-624-635-13
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                                                                                                                                                                                             Sequence 13, Application US/08624635
Patent No. 6204047
GENERAL INFORMATION:
APPLICANT: Lee, Se-Jin
APPLICANT: Lee, Se-Jin
APPLICANT: Cunningham, No. 6204047een
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 20; Conserva
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Huynh, Thanh
APPLICANT: Lee, Se-Jin
TITLE OF INVESTION: ANTIBODIES SPECIFIC FOR GROWTH DIFFERENTIATION FACTOR-8 AN
NUMBER OF SEQUENCES: 32
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CLONE: OP-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 07
TELECOMMUNICATION INFORMATION:
TELEPHONE: 858-677-1456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                CORRESPONDENCE ADDRESS:
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                                                                                                                                                                             UMBER OF SEQUENCES:
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ZIP: 92121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Haile, Ph.D, Lisa REGISTRATION NUMBER: 38,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 08/5 FILING DATE: 19-SEP-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/177,860A FILING DATE: 23-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM:
SOFTWARE: FastSE(
                                                                                       CITY: Los Angeles
STATE: California
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                                                                                                                            STREET:
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                                                                      COUNTRY:
                                                                                                                                             ADDRESSEE:
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                                                                                                                            E: Spensley Horn Jubas & Lubitz
1880 Century Park East, Suite 500
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1..119
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100.0%; Pred. No. 6.4e-08;
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Gaps

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TELEFAX: (617) ... 1:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
TRNGTH: 119 amino acids
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CLASSIFICATION: 536

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/134,078

FILING DATE: 08-OCT-1993

ATTORNEY/AGENT INFORMATION:
NAME: Wetherell, Jr., ph.D., John R.,
REGISTRATION NUMBER: 31,678

REFERENCE/DOCKET NUMBER: DD-3054

TELEPHONE: (619) 455-5100
            ATTULATION NUMBER: 08/003,144
PILING DATE: 12-JAN-193
ATTORNEY/AGENT INFORMATION:
NAME: Lisa A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/05
TELECOMMUNITATION
                                                                                                   FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/455
FILING DATE: 31-MAY-1995
APPLICATION NUMBER: 08/003
FILING DATE: 12-JAN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Lee, Se-Jin
APPLICANT: Huyth, Thanh
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-5
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                      COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: PastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
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SOFTWARE: Patentl
                                                                                                                                                                                                                      APPLICATION NUMBER:
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STRANDEDNESS: si
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                                                                                                                                                             08/455,559
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Pred. No. 6.4e-08;
Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Lee, Se-Jin
APPLICANT: Lee, Se-Jin
APPLICANT: McPherron, Alexandra C.
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8 NUCLEIC
TITLE OF INVENTION: ACID AND POLYPEPTIDES FROM AQUATIC SPECIES AND NON-HUMAN
TITLE OF INVENTION: TRANSGENIC AQUATIC SPECIES
FILE REFERENCE: JHILIQO-9
CURRENT TILING DATE: 1999-08-19
EARLIER APPLICATION NUMBER: 08/795,071
EARLIER FILING DATE: 1997-02-05
EARLIER FILING DATE: 1997-02-05
EARLIER FILING DATE: 1997-02-05
EARLIER FILING DATE: 1997-03-05
EARLIER FILING DATE: 1995-03-19
EARLIER FILING DATE: 1993-03-19
NUMBER OF SEQ ID NOS: 41
SOFTWARE: FastSEQ for Windows Version 4.0
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US-09-378-238-26
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                                                                                                                                                                                                     US-09-629-938-22
                                                                                                                                                                                                                          RESULT 37
                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-378-238-26
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Matches
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                                                                                                                                        Sequence 22, Applicati
Patent No. 6500664
GENERAL INFORMATION:
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Best Local Similarity
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IMMEDIATE SOURCE:
CLONE: OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE:
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NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Gray Cary Ware & Freidenrich LLP
                                                                                                                          APPLICANT: Huynh,
                                                                                       TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                 74 INPETVPKPCCAPTQLNAIS 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             74 INPETVPKPCCAPTOLNAIS 93
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                                                                                                                                                                                                                                                                                                             INPETVPKPCCAPTQLNAIS
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                                                                                                                                                                                   Application US/09629938
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                                                                                                          Se-Jin
                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 111; DB 4;
100.0%; Pred. No. 6.4e-08;
                                                                                                                            Thanh
                                                                   ANTIBODIES SPECIFIC FOR GROWTH DIFFERENTIATION FACTOR-8 AND METHODS OF USING SAME (Amended)
                                                                                                                                                                                                                                                                                                                                                            0
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Pred. No. 6.4e-08;
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RESULT 35 US-09-145-060-18

Sequence 18, Appli Patent No. 6245896 GENERAL INFORMATI

ADDREST:
STREET:
TTY: La Jos

COUNTRY:

USA

92037

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Gaps

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; NAME/KEY: ; LOCATION: US-08-624-635-13

CLONE: OP-1

COPOLOGY:

Query Match Best Local : Matches

Local

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B
CURRENT FILING DATE: US/09/686,344
CURRENT FILING DATE: 2000-10-10
PRIOR APPLICATION NUMBER: 08/862,445
PRIOR FILING DATE: 1997-05-23
PRIOR APPLICATION NUMBER: 08/847,910
PRIOR TILING DATE: 1997-04-28
PRIOR APPLICATION NUMBER: 08/795,071
PRIOR APPLICATION NUMBER: 08/795,071
PRIOR APPLICATION NUMBER: 08/525,596
PRIOR FILING DATE: 1997-02-05
PRIOR FILING DATE: 1995-10-26
PRIOR FILING DATE: 1995-10-26
PRIOR APPLICATION NUMBER: 08/03019
PRIOR APPLICATION NUMBER: 08/033,923
PRIOR APPLICATION NUMBER: 08/033,923
PRIOR APPLICATION NUMBER: 08/033,923
PRIOR FILING DATE: 1993-03-19
NUMBER OF SEQ ID NOS: 51
SOPTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-629-938-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 40, Application US/09686344 Patent No. 6607884
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -09-686-344-40
                                                                                                                                                                                                                                                                                                                             APPLICANT: Lee, Se-Jin
APPLICANT: McPherron, Alexandra C.
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
FILE REFERENCE: 07265/144001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 858-677-1465 INFORMATION FOR SEQ ID NO: 22:
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MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/09/629,938
FILING DATE: 01-Aug-2000
CLASSIFICATION: CUNknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: Protein
LOCATION: 1..119
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Haile, Ph.D, Lisa A. REGISTRATION NUMBER: 38,347 REFERENCE/DOCKET NUMBER: 07265/075003 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 09/177,860 FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 119 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE
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                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               74
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      FastSEQ for Windows Version 4.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
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Pred. No. 6.4e-08;
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US-09-619-061-12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: THE JOINS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
APPLICANT: LEE, Se-Jin
APPLICANT: LEE, Se-Jin
APPLICANT: HUYNH, Thanh
TITLE OF INVENTION: ANTIBODIES BINDING TO GROWTH DIFFERENTIATION FACTOR-7
FILE REFERENCE: JUHU1190-2
CURRENT APPLICATION NUMBER: US/09/412,791D
CURRENT APPLICATION NUMBER: US 08/581,528
PRIOR APPLICATION NUMBER: US 08/581,528
PRIOR PILING DATE: 1996-01-09
PRIOR APPLICATION NUMBER: PCT/US94/07799
PRIOR APPLICATION NUMBER: DCT/US94/07799
PRIOR FILING DATE: 1996-01-08
RUMBER OF SEQ ID NOS: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn version 3.0 SEQ ID NO 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 12, Application US/09619061 Patent No. 6713302 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 20; Conservative 0
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TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Homo sapiens
COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOPTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION UNMBER: US/09/619,061

FILING DATE: 18-Jul-2000

CLASSIFICATION: CUnknown>
                                                                                                                                                                                                                                                                                                                                                                             Huynh, Thanh
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6
NUMBER OF SEQUENCES: 21
                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lee, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   74 INPETVPKPCCAPTQLNAIS 93
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                                                                                                                                                                                                                                                               CITY: La Jolla
STATE: California
                                                                                                                                                                                                                                            COUNTRY: USA
                                                                                                                                                                                                                                                                                                           STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Fish & Richardson
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Pred. No. 6.4e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93
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Length 119;

Gaps

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RESULT 41
PCT-US94-00657-18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 18, Application PC/TUS9400657 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 100.0%; Score 111; DB 4; Best Local Similarity 100.0%; Pred. No. 6.4e-08;
                                                                                                     INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 119 amino acids
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INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: SE-UIN LL.
APPLICANT: HUYNH, THANH
THANH GROWTH DIFFERENTIATION FACTOR-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
CITY: LOS ANGELES
                                                                                                                                                                                                                                                      CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. PH.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD3256 CIF
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, Version #1.25
   MOLECULE TYPE:
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FILING DATE: 15-JUN-1998
APPLICATION NUMBER: US 08/581,529
FILING DATE: 15-APR-1996
ATTORNEY/AGENT INFORMATION:
NAME: Lisa A. Haile, Ph.D.
REGISTRATION NUMBER: 36,347
REFERENCE/DOCKET NUMBER: 07265/082001
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 1/12/9
                                 STRANDEDNESS:
TOPOLOGY: 111
                                                                                                                                                                                                                                TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          74 INPETVPKPCCAPTQLNAIS 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 INPETVPKPCCAPTQLNAIS 20
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                                                                                   amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: Protein LOCATION: 1..119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLONE: OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ENGTH: 119 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PE: amino acid
                  linear
                                                                                                                                                                                                                                619/455-5100
                                                                                                                                                                                                                                                                                                                                                                                                                                   1/12/94
   protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (619) 678-5070
19) 678-5099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCT/US94/00657
                                                                                                                                                                            18:
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                                                                                                                                                                                                                                                                                              FD3256 CIP OF PD2280
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RESULT 43
PCT-US94-07799-12
; Sequence 12, Application PC/TUS9407799
; GENERAL INFORMATION:
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PCT-US94-07762-12
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Sequence 12, Application (), ).
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Best Local Similarity 100.0%;
Matches 20; Conservative 0
                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (619) 455-511
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
ATTORNEY AGENT INFORMATION:
NAME: TUMARKIN, LISA A., PH.D.
REGISTRATION NUMBER: P-38,347
REFERENCE/DOCKET NUMBER: FD2349
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FOR PC COMPUTER: FOR 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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STREET: 1880 Century Park East, Suite 500
CITY: Los Angeles
STATE: California
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                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: Protein LOCATION: 1..119
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FILING DATE: 08-JUL-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ENGTH:
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                                                                                                                                                                         74 INPETVPKPCCAPTQLNAIS 93
                                                                                                                                                                                                                    1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                              Score 111; DB 5;
Pred. No. 6.4e-08;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 111; DB 5;
Pred. No. 6.4e-08;
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Matches

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RESULT 44
US-07-718-274A-2
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REGISTRATION NUMBER: P-38,347
REFERENCE/DOCKET NUMBER: FD-2348
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
TELEPHONE: (619) 455-5110
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                         Patent No.
                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, VeCURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US94/07799
FILING_DATE: 08-JUL-1994
                                                                                                                                                                                                                                                                               APPLICANT: Grinna, Lynn
APPLICANT: Parsons, Thomas |
APPLICANT: Theofan, Georgia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

OCCUPATION OF THE PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                    TLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: Protein LOCATION: 1..119
                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS:
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5. 5284756
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                                                                                                                            Chicago
: Illinois
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                                                                                              60603
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                                                                                                                                                               Street
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1880 Century Park East, Suite 500
                                                                                                                                                                                  Two First National Plaza, 20 South Clark
                                                                                                               USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
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                                                                                                                                                                                               Marshall, O'Toole, Gerstein, Murray &
Bicknell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
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                                                                                                                                                                                                                                                     Osteogenic Factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 111; DB 5; 100.0%; Pred. No. 6.4e-08;
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RESULT 45
US-08-163-877-10
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                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/08/163,877
FILING DATE:
CLASSTETATE:
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Best Local Similarity
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                                                                             CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Lazar Steven R.
REGISTRATION NUMBER: 32,618
REFERENCE/DOCKET NUMBER: GI 5219
TELECOMUNICATION INFORMATION:
TELEPHONE: 617 876-1170 x 8260
TELEPAX: 617 876-8851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/415,555
FILING DATE: 04-OCT-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/256,034
FILING DATE: 11-OCT-1988
ATTORNEY/AGENT INFORMATION:
NAME: Sharp, Jeffrey 5.
REGISTRATION NUMBER: 27129/9430
REFERENCE/DOCKET NUMBER: 27129/9430
                                                            TELEFAX: 617 876-5851
INFORMATION FOR SEQ ID NO: 10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: McCoy, Long APPLICANT: McCoy, Beth APPLICANT: Murray, Beth APPLICANT: Wolfman, Neil APPLICANT: Wolfman, Neil CAPPLICANT: WOLFMANTS OF BONE MORPHOGENIC PROTEINS
              SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
TYPE: amino acid
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LENGTH: 139 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                  STREET: o, Cambridge
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                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
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COPOLOGY: linear
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5399677
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                                                                                                                                                                                                                                                                                                                                                                                   Massachusetts
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RESULT 47
US-08-298-021-2
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Best Local Similarity 100.
Matches 20; Conservative
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                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/149,106
APPLICATION UNMBER: US/08/149,106
APPLICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/415,555
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/256,034
FILING DATE: 11-0CT 1988
                                                                                                                                                                                                                                                                                                    TELEFAX: (312) 984-9740
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRE STREET: StreSTREET: StreSTITY: Chicago TITY: Illinois USA
                                                                                                                                                                                                                   TYPE: amino acids
TYPE: amino acids
TYPE: amino acid
TOPOLOGY: line-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Sharp, Jeffrey S.
REGISTRATION NUMBER: 31,879
REFERENCE/DOCKET NUMBER: 27.
                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION: TELEPHONE: (312) 346-5750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JICANT: Parsons, Thomas F.
JICANT: Theofan, Georgia
JE OF INVENTION: Osteogenic Factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94
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                                                                     INPETVPKPCCAPTQLNAIS 113
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                                                                                                                                     Conservative
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                                                                                                                                                   100.0%; Score 111; DB 1; 100.0%; Pred. No. 7.5e-08;
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Best Local Similarity
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MOLECULE TYPE:
US-08-298-021-2
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                                                                                                                                       Patent No.
                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
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APPLICATION NUMBER: US 08/149,106

FILING DATE: 11-OCT-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/718,274

APPLICATION NUMBER: US 07/718,274
                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0.
FILING DATE: 11-OCT-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 20-JUN-1991 PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                     APPLICANT:
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                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Sharp, Jeffrey S
REGISTRATION NUMBER: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 139 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                         amino acid
                                                                                                                                                     Application US/08278729A
 OPPERMANN, HERMAN OZKAYNAK, ENGIN KUBERASAMPATH, THAN RUEGER, DAVID C. PANG, ROY H.L. COHEN, CHARLES M.
                                                                                                                                                                                                                                                                                                     100.0%;
ilarity 100.0%;
Conservative 0
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                       protein
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COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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LICANT: Theofan, Georgia
LE OF INVENTION: Heterodimeric Osteogenic Factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
                        Score 111; DB 1;
Pred. No. 7.5e-08;
                                                 Length 139;
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; LOCATION: 1..139
; OTHER INFORMATION:
US-08-278-729A-5
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US-08-155-343A-5
                                                                                                                                                                                                                                                                                                                                                                                                           Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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Best Local
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INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC Compatible
COMPUTER: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/278,729A
FILING DATE: 20-UUL-1994
CLASSIFICATION: 435
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
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CORRESPONDENCE ADDRESS: ADDRESSE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: PITCHER ESq., EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (508) 435-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
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ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                             APPLICANT: OPPERMANN, HER APPLICANT: COHEN, CHARLES APPLICANT: PANG, ROY H.L.
                                                                                                                                                                                                                                      UMBER OF SEQUENCES:
                                                                                                                                                                                                                                                       ITLE OF INVENTION: MORPHOGENIC-INDUCED PERIODONTAL TISSUE TILE OF INVENTION: REGENERATION.
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APPLICATION DATA:
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linear
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Pred. No. 7.5e-08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                             APPLICATION NUMBER: US/08/406,672
FILING DATE: 20-MAR-1995
CLASSIFICATION: 435
CLASSIFICATION DATA:
APPLICATION NUMBER: US 752,857
FILING DATE: 30-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 667,274
APPLICATION NUMBER: US 667,274
FILING DATE: 11-MAR-1991
ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESG., GILLIAN M.
REGISTRATION NUMBER: 36,508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 5
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: FENTON ESq., GILLIAN M. REGISTRATION NUMBER: 36,508 REGISTRATION NUMBER: CRPTELECOMMUNICATION INFORMATION: TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC COMPUTER: OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT AD
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REFERENCE/DOCKET NUMBER: CR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS IN METABOLIC BONE DISEASES
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                                                                                                                                                                                                                                                                                                                                                                                                           CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                            STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 15-NO
                                                                                                                                                                                                                                                                                                                                                       ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94 INPETVEKECCAPTQUARS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 l Similarity
20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                            45 SOUTH STREET
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OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                `100.0%; Score 111; DB 1; ilarity 100.0%; Pred. No. 7.5e-08; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KUBERASAMPATH, COHEN, CHARLES
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linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "HOP-1 (MATURE FORM)"
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                                                                                                                                         TELEPAX: (508) 435-6951
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: TWOMEY ESQ., MICHAEL J.
REGISTRATION NUMBER: 38,349
REFERENCE/DOCKET NUMBER: CRP-058CN2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (508) 435-9001
                                                                                                                                                                                                                                                                                            CUASSTET STATES OF MAY-1996

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/643,563A

FILING DATE: 06-MAY-1996

CLASSTET CASTON
                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
                                                              MOLECULE TYPE:
LOCATION: 1..139
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                  OPERATING SYSTEM:
SOFTWARE: Patenti
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OTHER INFORMATION: /note= "HOP-1 (MATURE FORM)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY:
                              NAME/KEY: Protein
                                                                             LENGTH: 139 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
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STRANDEDNESS: single
                                                                                                                                                                                                                                                                                          CLASSIFICATION:
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OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SMART, JOHN
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 /note= "HOP-1 (MATURE FORM)"
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Best Local S
Matches 20
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Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patent No.
                                                                                                                                                                                                                                                                                                    TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acid
                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/643
FILING DATE: 06-MAY-1996
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESG., GILLIAN M.
REGISTRATION NUMBER: 36,508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS
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STATE: MA
                                                                                                                                           LOCATION: 1..139
OTHER INFORMATION:
                                                                                                                                                         NAME/KEY: Protein LOCATION: 1..139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET:
                                                                                                                                                                                                                                     TYPE: amino acid
STRANDEDNESS: sir
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94 INPETVPKPCCAPTQLNAIS 113
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                                                                              Similarity
                            INPETVPKPCCAPTQLNAIS 20
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RUEGER, DAVID C.
OPPERMANN, HERMA
                                                                                                                                                                                                                                                                    139 amino acids
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PANG, ROY H.L.
PENTION: MORPHOGENIC-INDUCED PERIODONTAL TISSUE
                                                              Conservative
                                                                                                                                                                                                      protein
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                                                           100.0%; Score 111; DB 1; 100.0%; Pred. No. 7.5e-08; tive 0; Mismatches 0;
                                                                                                                                           /note= "HOP-1 (MATURE FORM)'
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ER: CRP-067CN
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Pred. No. 7.5e-08
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; Sequence 5, Application US/08462623 ; Patent No. 5739107 ; GENERAL INFORMATION:

US-08-462-623-5

RESULT 53

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                                                                                                                                                       Patent No.
                                                                                                                                                                                                                                                                                                                    Matches
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Best Local
                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOPTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/462,623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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TITLE OF INVENTION: ULCERS.
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APPLICANT:
APPLICANT:
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REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
FILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: protein
                                                                                                        APPLICANT:
                                                                           APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: 1..139
OTHER INFORMATION: /note= "HOP-1 (MATURE FORM)"
                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
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                                                                                                                                                                     Application US/08451953A
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                                          : OPPERMANN, HERMAN
: OZKAYNAK, ENGIN
: KUBERASAMPATH, THANGAVEL
: RUEGER, DAVID C.
: PANG, ROY H.L.
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                                                                                                                           SMART,
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PANG, ROY H.L.
OZKAYNAK, ENGIN
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CHARETTE, MARC F.
KUBERASAMPATH, THANGAVEL
                                                                                                                                                                                                                                                                                                                    Conservative
                            COHEN,
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CHARLES M.
': MORPHOGENIC PROTEIN SCREENING METHOD
'S: 33
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: MORPHOGEN TREATMENT OF
                                                                                                                                                                                                                                                                                                                  100.0%; Score 111; DB 1; 100.0%; Pred. No. 7.5e-08; ive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                 Length 139;
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US-08-360-914B-10
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                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 10, Applicat Patent No. 5756308
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, 'CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/451,953/
FILING DATE: 26-MAY-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (508) 435-6951 (NFORMATION FOR SEQ ID NO: 5:
           APPLICATION NUMBER: US/08/360,914B
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/163,877
FILING DATE: December 7, 1993
                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ., EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (508) 435-9001
                                                                                                                                                                                                                                                                                                                                       APPLICANT: Neil M. WOLFMAN and John McCOY
TITLE OF INVENTION: MUTANTS OF BONE MORPHOGENIC PROTEINS
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS: single TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: Protein LOCATION: 1..139 OTHER INFORMATION:
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CITY: Cambridge
                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: UZIP: 01748
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94 INPETVPKPCCAPTQLNAIS 113
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                                                                                                                                                                                                                                                                      Massachusetts
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87 CambridgePark Drive
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linear
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Pred. No. 7.5e-08;
); Mismatches 0;
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RESULT 56
US-08-741-589A-10
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REGISTRATION NUMBER: 32,618
REFERENCE/DOCKET NUMBER: GI 5
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617 498-8260
TELEPAX: 617 876-5851
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                       CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNMER: US 08/163,
FILING DATE: December 7, 1993
ATTORNEY/AGENT IMPORMATION:
NAME: LAZAT: Steven R.
REGISTRATION NUMER: 32,618
REFERENCE/DOCKET NUMER: GI 57
TELECOMMUNICATION: TELECOMMUNICATION: TELECOMMUNICATION 1098-8260
TELECHNOE: 617 498-8260
TELEPHONE: 617 876-5851
INFORMATION FOR SEO ID NO: 10:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/741.5007
FILING DATE:
CLASCITE:
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Patent No. 5
                                                                      Query Match
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Best Local Similarity
Matches 20; Conserv
                                                                    Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Neil M. WOLTITLE OF INVENTION: MUNDHER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
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CITY: Cambridge
STATE: Massachus
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amino acid
                                 INPETVPKPCCAPTQLNAIS 20
INPETVPKPCCAPTQLNAIS 113
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87 CambridgePark Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 111; DB 1; ilarity 100.0%; Pred. No. 7.5e-08; Conservative 0; Mismatches 0;
                                                                  100.0%; Score 111; DB 1; llarity 100.0%; Pred. No. 7.5e-08; Conservative 0; Mismatches 0;
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                                                                                                                                                                          linear
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ON: MUTANTS OF BONE MORPHOGENIC PROTEINS
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                                                                                                  Length 139;
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MEDIUM TYPE: Floppy disk
COMPUTER: TEM PC compatible
COMPUTER: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/445,468A
FILING DATE: 22-NAY-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: FENTON Esq., GILLIAN M.
REGISTRATION NUMBER: GREDON:
NAME: FENTON Esq., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-072FW2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
INFORMATION FOR ESG ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
TYDE: amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                            ; NAME/KEY: Protein
; LOCATION: 1..139
; OTHER INFORMATION: /note= "HOP-1 (MATURE FORM)"
US-08-445-468A-5
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                                                                                                                                                   sequence 5, Application US/08461397A Patent No. 5972884
                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
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APPLICANT: KUBERAL
APPLICANT: RUEGER
                                                                                                     GENERAL INFORMATION:
APPLICANT: CHARET
                                                                                                                                                                                                08-461-397A-5
                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESSE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: MORPHOGEN-INDUCED LIVER REGENERATION NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
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STREET: 45 SOUT
CITY: HOPKINTON
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TOPOLOGY: li
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OPPERMANN, HERMAN
PANG, ROY H.L.
OZKAYNAK, ENGIN
SMART, JOHN E.
                                                                CHARETTE, MARC F.
KUBERASAMPATH, THI
RUEGER, DAVID C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KUBERASAMPATH, THANGAVEL RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COHEN, CHARLES M.
                                                                                                                            COHEN, CHARLES M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
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                                                                                        THANGAVEL
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Pred. No. 7.
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0

OF INVENTION:

MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELLS

NUMBER OF SEQUENCES:

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US-08-912-088-5
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APPLICANT: SMART, JOHN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 617/248-7100 5:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/461,397A FILING DATE: 05-JUN-1995 CLASSIFICATION: 514 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
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ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE:
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                                                                                                                                                                                                                                        TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: Protein
LOCATION: 1..139
OTHER INFORMATION: /note= "HOP-1 (MATURE FORM)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 139 amino acids TYPE: amino acid sTRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                    CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
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REFERENCE/DOCKET NUMBER: CR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 01748
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                                                                                                              01748
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/08912088
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                                                                                                                                                                                                                                                                                            : OPPERMANN, HERMAN
: OZKAYNAK, ENGIN
: KUBERASAMPATH, THANGAVEL
: RUEGER, DAVID C.
: PANG, ROY H.L.
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                                                                                                                               USA
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                                                                                                                                                                                                                                                                               COHEN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      617/248-7000
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                                                                                                                                                                                                                                                                               CHARLES M.
                                                                                                                                                                                                                                                           MORPHOGENIC PROTEIN SCREENING METHOD
                                                                                                                                                                                                                                          ယ္ပ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 139;
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COMPUTER READABLE

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/06/278,730A
FILING DATE: 20.7ULY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESG., GILLIAN M.
REFERENCE/DOCKET NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-071FW
TELEPHONE: (617) 248-7560
TGLEPHONE: (617) 248-7100
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Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/912,086
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/278,729
                                                                                                                                                                                                                                                                                   ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: PITCHER EGG., EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-(
TELECOMMUNICATION INFORMATION:
TELEPHONE: (508) 435-9001
                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS: single TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                             CITY:
STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: Protein LOCATION: 1.139 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                         STREET:
                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5, Application US/08278730A
5. 6022853
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                                                                                                                                                                                                                                                                                                                                                                                             45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         139 amino acids
                                                                                                                                                                                                                                                                                                                                           USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COHEN, CHARLES M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KUBERASAMPATH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 111; DB 2; ilarity 100.0%; Pred. No. 7.5e-08; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PANG, ROY H.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ss: single
linear
                                                                                                                                                                                                                                                                                                                                                                                                             PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DAVID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "HOP-1 (MATURE FORM)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  THANGAVEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CRP-058CPFW
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RESULT 61

tent No.

ے 5, 607,

Application US/08445467

INFORMATION:

APPLICANT:

멂

1 INPETVPKPCCAPTQLNAIS 20

US-08-278-730A-5

MOLECULE TYPE: protein FEATURE:

TOPOLOGY:

linear

TYPE: amino acid STRANDEDNESS: single

NAME/KEY: Protein LOCATION: 1.139 OTHER INFORMATION: /note= "HOP-1 (MATURE FORM)"

Matches

20; Conservative

0; Mismatches

Length 139; Indels

0

Query Match 100.0%; Score 111; DB 3; Best Local Similarity 100.0%; Pred. No. 7.5e-08;

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Gaps
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                                                                                                                          ; TOPOLOGY: 1; MOLECULE TYPE: US-08-443-676-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: Protein
LOCATION: 1..139
OTHER INFORMATION: /label= hOP1-MATURE
US-08-445-467-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No. 6077988
GENERAL INFORMATION:
APPLICANT: KUBERROW
APPLICANT: KUBERROW
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US-08-443-676-1
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                                                                                                                                                                               TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
TYPE: amino acid
                                                             Query Match
Best Local S
Matches 20
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Best Local Similarity 100.
Marches 20; Conservative
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                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOSTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/443,676
FILLING DATE: 18-MAY-1995
CIASSIFICATION: 623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: Homo sapier
TISSUE TYPE: HIPPOCAN
                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 623
ATTORNEY/AGENT INFORMATION:
NÄME: KELLEY, ROBIN D
REGISTRATION NUVMBER: 34,637
REFERENCE/DOCKET NUMBER: ST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: BERLOWI TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 125 H
CITY: Boston
STATE: MA
                                                                                                                                                     TYPE: STRANDEDNESS: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
STRANDEDNESS: sin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Patent Administrator, Testa, Hurwitz
ADDRESSEE: Thibeault, LLP
                                                                                                                                                                                                                                                      TELEPHONE: (617) 248-7000 TELEFAX: (617) 248-7100
 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94 INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 INPETVPKPCCAPTQLNAIS 20
                                                                              Similarity
INPETVPKPCCAPTQLNAIS 113
                            INPETVPKPCCAPTQLNAIS 20
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                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
E: HIPPOCAMPUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KUBERASAMPATH, Thangavel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                         peptide
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                                                             100.0%; Score 111; DB 3; 100.0%; Pred. No. 7.5e-08; ative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
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Pred. No. 7.5e-08
                                                                                          Length 139;
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                                                             Gaps
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APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/753,059
FILING DATE: 30-AUG-1991
PRIOR APPLICATION NUMBER: US 07/752,764
FILING DATE: 30-AUG-1991
AFFILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REGISTRATION NUMBER: 27,829
REGISTRATION NUMBER: CRP-059CP.

REFERENCE/DOCKET NUMBER: CR TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000

TELEFAX: 617/248-7100
FORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:

APPLICATION NUMBER: US/08/445,467
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/165,511
FILING DATE:
APPLICATION NUMBER: US/07/938,336
FILING DATE:
CHILING DATE:

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:

CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE BIOMOLECULES, INC
STREET: 35 SOUTH STREET

COUNTRY:

USA

01748

CITY: HOPKINTON

3

NUMBER OF SEQUENCES:

E OF INVENTION: MORPHOGEN-INDUCED MODULATION OF E OF INVENTION: INFLAMMATORY RESPONSE

RUEGER, DÁVID C COHEN, CHARLES M OZKAYNAK, ENGIN

PANG, ROY HL OPPERMANN, H

HERMANN

KUBERASAMPATH, THANGAVEL

SMART, JOHN E

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US-08-480-515A-5
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                                                                                                                                                                                      Patent No.
                                                                                                                                                                                                                                                                                                                                                           Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: KUBERA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDICA TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: PATENTIAL PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: US/08/480,515A FILING DATE: 07-UW-1995 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
                              TITLE OF INVENTION: METHOD FOR MODULATING INFLAMMATORY TITLE OF INVENTION: RESPONSE.

NUMBER OF SEQUENCES: 21
                                                                                                                 APPLICANT: PANG, ROY H.L.
APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                    APPLICANT:
                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 1..139
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
STRANDEDNESS: sin
                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
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                                                                                                                                                                         15, ALL
NO. 6194376
                                                                                                                                                                                                                                                                                        94 INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                         20;
                                                                                                                                                                                                                                                                                                                        1 INPETVEKECCAPTOLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01748
                                                                                                                                                                                                                                                                                                                                                         Similarity 100.
20; Conservative
                                                                                                                                                                                                     Application US/08414033A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FENTON ESq., GILLIAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/08480515A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                139 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
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SMART, JOHN E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KUBERASAMPATH, THANGAVEL PANG, ROY H.L. OPPERMANN, HERMANN RUEGER, DAVID C.
                                                                             COHEN, CHARLES M.
                                                                                                                                                  KUBERASAMPATH, THANGAVEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
Testa, Hurwitz & Thibeault
                ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              single
                                                                                                   DAVID C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MORPHOGEN TREATMENT OF ORGAN TRANSPLANTS
                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 111; 100.0%; Pred. No. 7
                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "HOP-1 (MATURE FORM)"
                                                                                                                                                                                                                                                                                                                                                         0;
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                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                           Length 139;
                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                             0
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RESULT 65
US-08-271-556A-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3, Application US/08271556A Patent No. 6211146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: 5: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: FENTON ESq., Gillian M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC COMPATIBLE
CPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/414,033A
FILING DATE: 30-MAR-1995
CLASSIFICATION: 514
                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/271,556A
FILING DATE: 07-JUL-1994
                                                                                                                                                   ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ELECTION (617)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 139 amino acids
TYPE: amino acid
STRANDEDNESS: single
                               CLASSIFICATION:
                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                       CITY: HOPKINTON
                                                                                                                                                                                                                                                        STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: Protein LOCATION: 1..139
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Match 100.0%; Score 111; I
Local Similarity 100.0%; Pred. No. 7.1
es 20; Conservative 0; Mismatches
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APPLICATION NUMBER:
                                                                                                                                                                                                                                                                            ADDRESSEE:
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USA
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45 SOUTH STREET
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                                                                                                                                                                                                                                                                                 RUEGER, DAVIU
COHEN, CHARLES M
VVENTION: 60A PROTEIN-INDUCED MORPHOGENESIS
PROUENCES: 16
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                                                                                                                                                   Floppy disk
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 US 07/945,292
                                                                                                                                                                                                                                                                                                                                                                                HERMANN
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FILING DATE: 30-AUG-PRIOR APPLICATION DATA: APPLICATION NUMBER:

PRIOR APPLICATION DATA:
APPLICATION NUMBER:

PRIOR APPLICATION DATA:

15-SEP-1992

APPLICATION NUMBER: FILING DATE:

Floppy disk

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TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: 3: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 07/752,764
PILLING DATE: 30-AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 30-AUG-1991
PRIOR APPLICATION UNDEER: US 07/923,780
PRILING DATE: 31-UUL-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 0 FILING DATE: 31-JUL-1992 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: 36,508
                                                                                       ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                           94 INPETVEKECCAPTOLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                 Application US/08440894A
                                                                                                                                                                                                                                     SMART, JOHN E
PANG, ROY HL
OPPERMANN, HERMANN
                                                                                                                                                               RUBGER, DAVID C
COHEN, CHARLES M
PENTION: METHOD FOR MODULATING INFLAMMATORY
PENTION: RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
E: HIPPOCAMPUS
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30-AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 111; DB 3; 100.0%; Pred. No. 7.5e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /label= hOP1-MATURE
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                                                                                                                                                                                                                                                                                               THANGAVEL
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Best Local Similarity
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INFORMATION FOR SEQ ID NO: 5
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
                   CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILING DATE: 2-MAY-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: PANG, ROY H.L.
APPLICANT: SMART, JOHN E.
TITLE OF INVENTION: TREAFMENT TO PREVENT LOSS OF AND/OR
TITLE OF INVENTION: INCREASE BONE MASS IN METABOLIC BONE DISEASES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/01
FILING DATE: 15-MAY-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Polocia
                                                                                                                                                                                                                                                          COUNTRY: US
ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 1..139
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
STRANDEDNESS: sin
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE:
COMPUTER: II
                                                                                                              APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94 INPETVEKECCAPTOLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/09170936
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FENTON Esq., GILLIAN M
                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OPPERMANN, HERMANN
OZKAYNAK, ENGIN
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                              RUEGER, DAVID PANG, ROY H.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KUBERASAMPATH, THANGAVEL COHEN, CHARLES M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (617)
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                                                        US 08/432,883
                                                                                                                              US/09/170,936
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Pred. No. 7.5e-08;
Mismatches 0;
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Gaps

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US-08-440-894A-5

GENERAL INFORMATION:

APPLICANT:
APPLICANT:

KUBERASAMPATH, SMART, JOHN E

APPLICANT:

APPLICANT: COHEN, CH TITLE OF INVENTION: 1 TITLE OF INVENTION: 1

CORRESPONDENCE

ADDRESS

21

STREET:

CITY: BOSTON

COUNTRY:

COMPUTER READABLE FORM:

02110 MA USA US-08-271-556A-3

TOPOLOGY: linear
MOLECULE TYPE: prot
ORIGINAL SOURCE:
ORGANISM: Homo sa
TISSUE TYPE: HIPP

protein

TYPE: amilioness:

single

ENGTH:

FENTON,

GILLIAN

H: 139 amino acids amino acid

FEATURE: NAME/KEY: Protein

LOCATION: 1..139
OTHER INFORMATION:

Matches Query Match Best Local

20;

Conservative

Similarity

Page

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; LOCATION: 1..139
; OTHER INFORMATION: /note= "HOP-1 (MATURE FORM)"
US-09-170-936-5
                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEC ID NOS: 51

SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 46
LENGTH: 139
TYPE: PRT
ORGANISM: Human
US-08-868-452-46
                                                                                                                                                                                     RESULT 69
US-08-461-113-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 68
US-08-868-452-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loc
Matches
                                                                                                                                                       Sequence 5, Application US/08461113 Patent No. 6399569
                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 46, Appli
Patent No. 6352972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                      Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT FILING DATE: 1997-06-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ENERAL INFORMATION:
APPLICANT: Marcel E. Nimni
APPLICANT: Frederick L. Hall
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: 5: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ITLE OF INVENTION: BONE MORPHOGENETIC PROTEINS ITLE OF INVENTION: USE IN BONE GROWTH LE REFERENCE: 17972-11
                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION: TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LICANT: Lingtao Wu
LICANT: Bo Han
LICANT: Edwin Shors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-060CPFWC
                                                                                                                                                                                                                                                                                                                                Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COPOLOGY:
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                                                                                                                                        INFORMATION:
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                                                                                                                                                                                                                                                                                                               l Similarity
20; Conserv
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                                                                         COHEN, CHARLES M.
CHARETTE, MARC F.
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
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                       OPPERMANN, HERMANN
PANG, ROY H.L.
OZKAYNAK, ENGIN
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JOHN E.

: MORPHOGEN TREATMENT FOR LIMITING
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Pred. No. 7.5e-08
                                                                                                                                                                                                                                                                                                                                Score 111; DB 3;
Pred. No. 7.5e-08
                                                                                                                                                                                                                                                                                                                 Mismatches
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US-08-456-033-5
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Best Local Similarity
Matches 20; Conserv
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PRICR APPLICATION DATA:
APPLICATION NUMBER: US 08/445,882
FILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESG., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: PROLIFERATION OF EPITHELIAL CELLS: NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein
                                                                                                                                                                                 TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                           PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: Protein
LOCATION: 1..139
OTHER INFORMATION: /note= "HOP-1 (MATURE FORM)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATABLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                       CITY: HOPKINTON STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 45 SOUTH
                                    ZIP: 01748
                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                             STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            94 INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01748
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amino acid
                                                                                                                                                                                                                                                                                                                                                                  Application US/08456033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES 45 SOUTH STREET
                                                                                                             45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                   PANG, ROY H.L.
COHEN, CHARLES M.
                                                     USA
                                                                                                                                                                                                                                                                       KUBERASAMPATH, THA
OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 111; DB 3; ilarity 100.0%; Pred. No. 7.5e-08; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                       MATION:
RUEGER, DAVID C.
RUEGER, DAVID C.
                                                                                                                                                                                                                                     OZKAYNAK, ENGI
PANG, ROY H.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (508) 435-9001
                                                                                                                                                                                   MORPHOGEN-INDUCED NERVE REGENERATION AND REPAIR.
                                                                                                                                                                                                                                                          ENGIN
                                                                                                                                                                   CJ
CJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/461,113
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 139;
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Gaps

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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/456,033
FILING DATE: 31-MAY-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy disk
COMPUTER: IRM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: MORPHOGEN TREATMENT FOR CHRONIC TITLE OF INVENTION: RENAL FAILURE NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT, LLP STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: Protein
LOCATION: 1..139
OTHER INFORMATION: /note= "HOP-1 (MATURE FORM)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 111; DB 4;
Pred. No. 7.5e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 139;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; FEATURE:
; OTHER INFORMATION: tissue type hippocampus hOP1-MATURE
US-09-464-206-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                 US-08-404-113A-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Pa
SEQ ID NO 5
LENGTH: 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                         Sequence 5, Applic Patent No. 6565843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
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                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: COHEN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 08/
PRIOR FILING DATE: 1995-03-01
NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/464,206
CURRENT FILING DATE: 1999-12-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Oppermann, Hermann APPLICANT: Rueger, David C. TITLE OF INVENTION: Protein I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                             APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: FORIGINAL SOURCE:
ORGANISM: Homo
                                                                                                     CORRESPONDENCE
                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                           APPLICANT: RUEGER, DAVID C.
TITLE OF INVENTION: PROTEIN-INDUCED TISSUE MORPHOGENESIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
               COUNTRY:
                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 100 les 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 1..139
OTHER INFORMATION: /label= hOP1-MATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS:
                                             TY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94 INPETVPKPCCAPTOLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                             1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 h 100.0%; Score 111; DB 4; Similarity 100.0%; Pred. No. 7.5e-08;
MA
USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PatentIn Ver.
                                                                                                                                                                                                                                                                                             Application US/08404113A
                                                                                                                                                                                                                                                                                                                                                                                         INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/09464206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cohen, Charles M.
Kuberasampath, Thangavel
                                                                   E: Testa, Hurwitz & Thibeault
125 High St.
                                                                                                                                                                                                                 KUBERASAMPATH, THANGAVEL
                                                                                                                                                                               PANG, ROY H.L
OPPERMANN, HEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
PE: HIPPOCAMPUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ON: Protein Induced Morphogenesis CBM-2 DIV (00960-502 DTV)
                                                                                                       ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein
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                                                                                                                                                                                                                                       CHARLES M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 111; DB 4; 100.0%; Pred. No. 7.5e-08; tive 0; Mismatches 0;
                                                                                                                                                                                 HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08/396,684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 139;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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JS-08-456-033-5

MOLECULE TYPE:

COPOLOGY:

linear

protein

TELEFAX: (508) 435-6951 INFORMATION FOR SEQ ID NO:

5

0

TELECOMMUNICATION INFORMATION:

(508) 435-9001

NAME: FENTON ESQ., GILLIAN M. REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-

CRP-070DV

TELEPHONE:

SEQUENCE CHARACTERISTICS:

LENGTH: 139 amino acids
TYPE: amino acid
STRANDEDNESS: single

Query Match

Local

Similarity

100.0%;

20;

Conservative

0

US-08-643-321-4

Sequence 4, Application US/08643321 Patent No. 6498142

GENERAL INFORMATION:

SAMPATH, KUBER T. COHEN, CHARLES M.

TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:

ENGTH:

139 amino acids

TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000

REFERENCE/DOCKET NUMBER: CRI

CRP-118

FILING DATE:
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: TWOMEY, MICHAEL J
REGISTRATION NUMBER: 38,

APPLICATION NUMBER: US/08/643,321

COMPUTER READABLE FORM: MEDIUM TYPE: Floppy

COUNTRY: U ZIP: 02110

MA USA

BOSTON

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us-10-619-910-11.00024.rai
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RESULT 74
US-09-882-875A-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
TELEPAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 139 antino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1, Application US/09882875A
Patent No. 6605117
GENERAL INFORMATION:
APPLICANT: KUBERASAMPATH, Thangavel
APPLICANT: KUBERASAMPATH, Thangavel
BERLOWITZ-TARRANT, Lawrence
TITLE OF INVENTION: SYNTHETIC BONE MATRIX
NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION WHERE: US/08/404,113A
FILING DATE: 14-MAR-1995
CLASSIFICATION: 424
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: FENTON Esq., Gillian M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: protein
                                                                                                                                           COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/882,875A
FILING DATE: 15-Jun-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 09/104,865

FILING DATE: 25-UN-1998

APPLICATION NUMBER: US 08/443,676

FILING DATE: 18-MAY-1995

APPLICATION NUMBER: US 07/529,852

FILING DATE: 29-MAY-1990

ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
STRANDEDNESS: sir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94 INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                            CITY: Boston
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Patent Administrator,
Thibeault, LLP
STREET: 125 High St.
                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ss: single
linear
                                                                                                                                                                                                                                                                                                                                              USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 111; DB 4; 100.0%; Pred. No. 7.5e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "hOP-1 (mature form)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36,508
ER: CRP-052CP FWC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 139;
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PCT-US92-01968-5
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US-09-374-958C-68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-374-958C-68
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Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: Mature H2223 mutant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                     NUMBER OF SEQUENCES:
                         CITY: BOSTON
STATE: MA
COUNTRY: USA
                                                                                   STREET:
         ZIP:
                                                                                                 ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
         02109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
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밁

Matches

TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: 1: TELECOMMUNICATION INFORMATION: TELEPHONE: (617) 248-7000 LENGTH: 139 amino acids
TYPE: amino acid NAME: VITO, Christine C
REGISTRATION NUMBER: 39,061
REFERENCE/DOCKET NUMBER: STK-049CN2 Mismatches 7.5e-08; DB 4; Length 139; 0

TOPOLOGY: linear

HOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-882-875A-1 94 INPETVPKPCCAPTQLNAIS 113 1 INPETVPKPCCAPTQLNAIS 20 100.0%; Score 111; ilarity 100.0%; Pred. No. 7 Conservative 0; Mismatche

0

Sequence 68, Application US/09374958C

Patent No. 6677432

GENERAL INFORMATION:
APPLICANT: Stryker Corporation
TITLE OF INVENTION: Modified Proteins and DNAs of the TGF-beta Superfamily, Including TITLE OF INVENTION: Modified Morphogenic Proteins
FILE REFERENCE: STK-076
CURRENT APPLICATION UNMBER: US/09/374,958C
CURRENT APPLICATION UNMBER: US/09/374,958C
CURRENT FILING DATE: 1999-08-16
NUMBER OF SEQ ID NOS: 90
SOCTWARE: Patentin version 2.0
SEQ ID NO 68
LENGTH: 139
TYPEN: DET

94 INPETVPKPCCAPTQLNAIS 113 INPETVPKPCCAPTQLNAIS 20 100.0%; Score 111; DB 4; ilarity 100.0%; Pred. No. 7.5e-08; Conservative 0; Mismatches 0. Length 139; Indels 0 Gaps

0

Sequence 5, Application PC/TUS9201968
GENERAL INFORMATION:
APPLICANT: COLEN, CHARLES M
APPLICANT: KUBERASAMPATH, THANGAVEL
APPLICANT: PANG, ROY HL
APPLICANT: PANG, ROY HL
APPLICANT: RUEGER, DAVID C
TITLE OF INVENTION: PROTEIN-INDUCED MORPHOGENESIS Application PC/TUS9201968 E: TESTA HURWITZ & THIBEAULT EXCHANGE PLACE 53 STATE STREET

CURRENT APPLICATION DATA:

APPLICATION NUMBER: FILING DATE: 19920

19920311

COMPUTER READABLE FORM: MEDIUM TYPE: Floppy

THE STATE OF THE S

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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 667,274
FILING DATE: 11-MAR-1991
PRIOR APPLICATION NUMBER: US 752,764
FILING DATE: 30-AUG-1991
APPLICATION INFORMATION:
NAME: PITCHER ESQ, EDWIND R
NAME: PITCHER ESQ, EDWIND R
                                                                                                                                                                                                                                                                                                                                                                            sequence 5, Application PC/TUS9307190 GENERAL INFORMATION:
                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UMBER: PCT/US93/07190
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         macon 100.0%; Score 111; DB 5; Local Similarity 100.0%; Pred. No. 7.5e-08; es 20; Conservative n. Minnotetics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 1..139
OTHER INFORMATION: /label= hOP1-MATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94 INPETVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                     35 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                         MORPHOGEN-ENRICHED DIETARY COMPOSITION: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCT/US92/01968
CRP-071
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LENGTH: 139 amin
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GENERAL INFORMATION:
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Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                            TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
LENGTH: 139 amino active
                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: KELLEY, ROBIN D.
REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: Floppy disk
COMPUTER: P105/MS-DOS
SOFTMARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/07231
FILING DATE: 1930729
CLASSIFICATION:
                                                                                      MOLECULE TYPE:
ORIGINAL SOURCE:
ORGANISM: Hom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
CREATIVE BIOMOLECULES, INC
STREET: 35 SOUTH STREET
CITY: HOPKINTON
STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: protein ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION:
LOCATION: 1..139
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 1..139
OTHER INFORMATION: /label= hOP1-MATURE
                                  NAME/KEY: Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM:
                                                                       ISSUE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YPE: amino acid
                                                                                                                                                         TRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SSUE TYPE: HIPPOCAMPUS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OLOGY:
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                                                                                                                                                                              amino acid
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linear
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                                                                       Homo sapiens
E: HIPPOCAMPUS
                                                                                                                                            linear
                                                                                                                       protein
                                                                                                                                                           single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REPAIR
/label= hOP1-MATURE
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Pred. No. 7.5e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 139;
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CT-US92-01968-5

NAME/KEY: Protein

WOLECULE TYPE: DRIGINAL SOURCE:

OPOLOGY:

linear protein

RGANISM: Homo sapiens ISSUE TYPE: HIPPOCAMPUS

REFERENCE/DOCKET NUMBER: CR.
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
(NFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:

REGISTRATION NUMBER:

27,829

0

Gaps

0

LENGTH: 139 amino acids TYPE: AMINO ACID STRANDEDNESS: single

ENGTH:

Matches

T-US93-07190-5

NUMBER OF SEQUENCES: 3

E OF INVENTION:

ADDRESSEE:

STREET: 35 L.
CITY: HOPKINTON

COUNTRY: U

USA

NAME: KELLEY, ROBIN D.
REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CR
BLECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000

Length 139;

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PCT-US93-08808-5
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PCT-US93-08742-5
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Best Local Similarity
Matches 20; Conserv
                             Sequence 5, Application PC/TUS9308808 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 5, Application PC/TUS9308742 GENERAL INFORMATION:
                                                                                                                                                                                                 Matches
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAMME: KELLEY ESQ, ROBIN D.
REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/08742
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE:
ORIGINAL SOURCE:
APPLICANT:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS, INC.
ADDRESSEE: CREATIVE BIOMOLECULES, INC.
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                            NAME/KEY: Protein LOCATION: 1..139 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 45 SOUTH
                                                                                                                                                                                                                                                                                                                                               TISSUE TYPE:
                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                  ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
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                                                                                                                                 94
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                                                                                                                                1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 139 amino acids
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                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
E: HIPPOCAMPUS
                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                protein
                                                                                                                                                                                                                                                                                                                                                                                                                              single
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 MORPHOGEN-INDUCED LIVER REGENERATION
                                                                                                                                                                                                                                                                                 /label= hOP1-MATURE
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                                                                                                                                                                                                                                Length 139;
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; LOCATION: 1..139
; OTHER INFORMATION:
PCT-US93-08808-5
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                                                                                                                                                                                                                                                                                   Sequence 5, Application PC/TUS9308885 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: 617/248-7477
TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE:
ORIGINAL SOURCE:
ORGANISM: Hom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/08808
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: KELLEY ESQ, ROBIN D.
REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CRI
                                                                                                                                                                                                 TITLE OF INVENTION: MO
TITLE OF INVENTION: UL
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE BIOMOLECULES, INC.
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7477
                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                       STREET: 45 C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo sapiens
TISSUE TYPE: HIPPOCAMPUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: U
ZIP: 01748
                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
                                                                                                                                                                                     ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : LOPOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                          20;
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                                                                                                     01748
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45 SOUTH STREET
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linear
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Pred. No. 7.5e-08;
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                   Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 139;
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Length 139;
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                                                                                                                                                                                                                                                                                           US-08-621-803-249
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US-08-621-803-249
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Best Local Similarity 100.
20; Conservative
                                                      Sequence 2, Application US/09271970 Patent No. 6242219 GENERAL INFORMATION:
                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 249, Application US/08621803 Patent No. 5851802
APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 161 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: BOTUL, Michael F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/0
FILING DATE: 22-MAR-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                          MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Better, Marc D.
TITLE OF INVENTION: Method
TITLE OF INVENTION: Fusior
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: 1i MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: 312/474-63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Chicago
STATE: Illinois
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
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                                                                                                                                                                 116 INPETVPKPCCAPTQLNAIS 135
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                                                                                                                                                                                                                                             Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    United
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    States of America
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                            100.0%; Score 111; DB 2; 100.0%; Pred. No. 8.7e-08; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US/08/621,803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                O'Toole,
Cower, 233
                                                                                                                                                                                                                                                                                                                                                                                    249:
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Pred. No. 7.5e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerstein, Murray & Borun
South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Version
                                                                                                                                                                                                                                                          Length 161;
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94 INPETVPKPCCAPTQLNAIS 113

1 INPETVPKPCCAPTOLNAIS 20

PCT-US93-08885-5

COCATION: 1..139
OTHER INFORMATION: NAME/KEY: Protein

/label= hOP1-MATURE

TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:

<u>ن</u>

H: 139 amino acids amino acid

REFERENCE/DOCKET NUMBER: CR TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7477

REGISTRATION NUMBER: 34,637

CRP-074

ROBIN D.

ATTORNEY/AGENT INFORMATION PRIOR APPLICATION DATA:
APPLICATION NUMBER:

FILING DATE:

APPLICATION NUMBER:

PCT/US93/08885

MOLECULE TYPE: |
ORIGINAL SOURCE:

ropology: ENGTH: TRANDEDNESS:

linear

protein single

TISSUE TYPE:

Homo sapiens E: HIPPOCAMPUS

ORGANISM:

Matches Query Match Best Local :

20;

Conservative

0

Mismatches

Indels

Similarity

100.0%;

Score 111; DB 5; Pred. No. 7.5e-08;

PCT-US94-13181-10

Sequence 10, Applicat GENERAL INFORMATION:

Application PC/TUS9413181

GENETICS INSTITUTE, INC.
VENTION: MUTANTS OF BONE MORPHOGENIC PROTEINS

APPLICANT:

NUMBER OF SEQUENCES: 1: CORRESPONDENCE ADDRESS: TITLE OF INVENTION:

STREET: o, or orderedge

87 CambridgePark Drive

Genetics Institute,

Inc - Legal Affairs

Massachusetts

USA

02140

ADDRESSEE:

NAME: Lazar, Steven R.
REGISTRATION NUMBER: 32,618
REFERENCE/DOCKET NUMBER: GI 5
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617 498-8260
TELEPAX: 617 876-5851

5219-PCT

CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:

US 08/163,877

APPLICATION NUMBER: FILING DATE:

FILING DATE: December 7, ATTORNEY/AGENT INFORMATION:

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:

PCT/US94/13181

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; LENGTH: 161
; TYPE: PRT
; ORGANISM: Human
US-09-271-970-2
RESULT 86
US-09-760-397-2
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US-09-217-352-249
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                                                                                                                                Matches
                                                                                                                                               Query Match
Best Local
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/621,803
FILING DATE: 22-MAR-1996
ATTORNEY/AGENT INFORMATION:
NAME: BOTUN, MICHAEL F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27129/3
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/271,970
CURRENT FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE:
                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                        TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                       TELEX: 25-3856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE:
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                                                                116 INPETVEKECCAPTOLNAIS 135
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                                                                                                                                20;
                                                                                                                                                 Similarity
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                                                                                       INPETVPKPCCAPTQLNAIS 20
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mino acid
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                                                                                                                              100.0%; llarity 100.0%; Conservative 0
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Pred. No. 8.7e-08;
); Mismatches 0;
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. 8.7e-08;
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; ORGANISM: Human
US-09-760-397-2
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US-07-841-646-9
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CURRENT FILING DATE: 2001-01-12
PRIOR APPLICATION NUMBER: 09/271,970
PRIOR FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION: MARC D.
APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
APPLICANT: Gavit, Patrick D.
TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
FILE REFERENCE: 1103/11041US01
FILE REFERENCE: 1103/11041US01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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Best Local Similarity 100.0%;
                             CLASSIFICATION: 530

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660,162
PRIOR APPLICATION NUMBER: US 660,162
PRIOR APPLICATION NUMBER: US 621,988
APPLICATION NUMBER: US 621,988
APPLICATION NUMBER: US 621,988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 621,988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 621,849
PRIOR APPLICATION NUMBER: US 621,849
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                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/841,646
FILING DATE: 19920221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                 FILING DATE: 04-DEC-1990 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION:
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RUBGER, U...
ROY H.L.
OSTEC
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53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       U.S.A.
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KUBERASAMPATH, T
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPPERMANN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OSTEOGENIC DEVICES
  US 616,374
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Pred. No. 8.7e-08;
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FILING DATE: PRIOR APPLICATI

APPLICATION DATA:

APPLICATION NUMBER: FILING DATE: 18-OC

18-OCT-1990

US 600,024

APPLICATION NUMBER:

18-OCT-1990

US 599,543

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                                                                                                                                   ; TOPOLOGY: 1; MOLECULE TYPE: US-08-147-023-9
Best Loc
Matches
                                Query Match
Best Local
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PILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 616.
FILING DATE: 21-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION DATA:
CONTROL OF THE 
                                                                                                                                                                                                                                                                                                                                         TELEPHONE: 617/248-7000
TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 9
                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 169 amino acid
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FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 6:
FILING DATE: 04-DEC-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
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PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
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FILING DATE: 21-FEB-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: PITCHER, EDMU REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 3 FILING DATE: 23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 422,613 FILING DATE: 17-OCT-1989
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                                Similarity
                                                                                                                                                                                                                                      amino acid
100.0%; Score 111; DB 1; ilarity 100.0%; Pred. No. 9.1e-08; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER: US 232,630
15-AUG-1988
                                                                                                                                                                        protein
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20-AUG-1990
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20-DEC-1991
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                                                                 Length 169;
   <u>;</u>
Gaps
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; MOLECULE TYPE: US-07-841-646-9

protein

TOPOLOGY:

TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:

TYPE: AMINO ACID

NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000

CRP-001CP6

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
ATTORNBY/AGENT INFORMATION:
NAME: DETICIES EDMINIS DETICIES

FILING DATE: 22-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 422,613
FILING DATE: 17-OCT-1989

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 483,913

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 569,920 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 579,865
FILING DATE: 07-SEP-1990

20-AUG-1990

Query Match Best Local S Matches 20

Similarity

100.0%; Score 111; DB 1; ilarity 100.0%; Pred. No. 9.1e-08; Conservative 0; Mismatches 0;

Length 169;

0

Gaps

20;

US-08-147-023-9 Sequence 9, Applic Patent No. 5468845 GENERAL INFORMATION:
APPLICANT: OPPERMANN, HERMANN
APPLICANT: OZKAYNAK, ENGAL,
APPLICANT: KUBERASAMPATH, THAN
APPLICANT: THAN APPLICANT: TITLE OF IN CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT STREET: 53 STATE STREET APPLICANT: PANG, ROY TITLE OF INVENTION: NUMBER OF SEQUENCES: APPLICANT: MPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COUNTRY: 124 INPETVPKPCCAPTQLNAIS 143 02109 INPETVPKPCCAPTQLNAIS 20 MASSACHUSETTS: U.S.A. Application US/08147023 OZKAYNAK, ENGIN KUBERASAMPATH, THANGAVEL RUEGER, DAVID C. N: OSTEOGENIC DEVICES ω

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124 INPETVPKPCCAPTQLNAIS 143

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US-08-447-570-9
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APPLICATION NUMBER: US 599,543
FILING DATE: 18-OCT-1990
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APPLICATION NUMBER: US 621,988
FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 621,849
FILING DATE: 04-DEC-1990
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APPLICATION NUMBER: 1
FILING DATE: 07-SEP-
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PRIOR APPLICATION NUMBER: US 810,560
                                  PRIOR APPLICATION DATA:
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APPLICATION NUMBER: US 616,374
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APPLICATION NUMBER: US 3: FILING DATE: 23-FEB-1989
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                                                   APPLICATION NUMBER: US 422,613 FILING DATE: 17-OCT-1989
                                                                                                        APPLICATION NUMBER: US 483,913 FILING DATE: 22-FEB-1990
                                                                                                                                                         APPLICATION NUMBER: US 569,920 FILING DATE: 20-AUG-1990
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CLASSIFICATION:
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RUEGER, L.
CNG, ROY H.L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E: TESTA, HURWITZ & THIBEAULT 53 STATE STREET
                                                                                                                                          CATION DATA:
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RUEGER, DAVID C.
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OZKAYNAK, ENGIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E: Floppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                         18-OCT-1990
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               US 315,342
                                                                                                                                                                                                                                 US' 579,865
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                                                                                                                 PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 810,560

FILING DATE: 20-DEC-1991

PRIOR APPLICATION DATA:

APPLICATION UNMBER: US 827,052

FILING DATE: 28-JAN-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 660,162

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 660,162

FILING DATE: 22-FEB-1991

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 621,988
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tent No.
                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                 FILING DATE: 04-DEC-
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE: 21-FEB CLASSIFICATION: 530
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 111; DB 1; ilarity 100.0%; Pred. No. 9.1e-08; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OZKAYNAK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           U.S.A.
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OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                          21-FEB-1992
                                                                                                       JMBER: US 621,988
04-DEC-1990
MBER: US 616,374
21-NOV-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OSTEOGENIC DEVICES
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                                                                       US 621,849
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RIOR APPLICATION DATA:

APPLICATION NUMBER:

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 579,865
FILING DATE: 07-SBF-1990
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 5 FILING DATE: 18-OCT-1990

US 599,543 US 600,024

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Length 169;
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Best Local Similarity
Watches 20; Conserva
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-449-699A-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 9, Applicatio Patent No. 6551995 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 169 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0
FILLING DATE: 01-NOV-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: PITCHER, EDMUND REGISTRATION NUMBER: (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000
                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AL INFURFACE.

APPLICANT: OPPERMANN, HERMA

OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                124 INPETVPKPCCAPTQLNAIS 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                          APPLICATION NUMBER: US/09/148,925C FILING DATE: 04-Sep-1998 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/09148925C
                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 02110
                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: U.S.A.
                                                   ILING DATE: 1-NOV-1993
PPLICATION NUMBER: US 07/841,646
ILING DATE: 21-FEB-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            169 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                              CATION NUMBER: US 08/147,023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KUBERASAMPATH, T
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EE: TESTA, HURWITZ & THIBEAULT 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 111; DB 2; 100.0%; Pred. No. 9.1e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PC-DOS/MS-DOS
NUMBER: US 07/579,865
                NUMBER: US 07/827,052
: 28-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Release #1.0, Version #1.25
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US-08-449-699A-9

ent No.

Sequence 9, Application US/08449699A

GENERAL INFORMATION:
APPLICANT: OPPERM
APPLICANT: OZKAYN

OZKAYNAK,

ENGIN

OPPERMANN, HERMANN

APPLICANT: KUBERASAMPATH, ITHWIGHTER
APPLICANT: RUEGER, DAVID C.
APPLICANT: PANG, ROY H.L.
TITLE OF INVENTION: ANTIBODIES TO OSTEOGENIC PROTEINS
NUMBER OF SEQUENCES: 33

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible

STREET:

DDRESSEE: TY: BOSTON

E: TESTA, HURWITZ 125 HIGH STREET

COUNTRY:

MASSACHUSETTS

02110

US-08-449-700-9

MOLECULE TYPE: protein

TOPOLOGY:

linear

TELEFAX: 617/248-7100 NFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:

9..

TYPE: amino acids
TOPOLOGY

TELECOMMUNICATION INFORMATION:

617/248-7000

TELEPHONE:

REGISTRATION NUMBER: 27 REFERENCE/DOCKET NUMBER:

27,829

CRP-001CP6

PITCHER, EDMUND

FILING DATE: 15-AUG-PRIOR APPLICATION DATA:

15-AUG-1988

US 232,630

APPLICATION NUMBER:

APPLICATION NUMBER: US 179,460 FILING DATE: 08-APR-1988 ATTORNEY/AGENT INFORMATION:

FILING DATE: 23-FEB-PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA:

APPLICATION NUMBER:

UMBER: US 315,342 23-FEB-1989

APPLICATION NUMBER: US 422,613 FILING DATE: 17-OCT-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 483,913 FILING DATE: 22-FEB-1990

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 56 FILING DATE: 20-AUG-1990

US 569,920

Best Loca Matches

Query Match 100.0%; Score 111; DB 2; Best Local Similarity 100.0%; Pred. No. 9.1e-08; Matches 20; Conservative 0; Mismatches 0;

Indels

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RESULT 93
US-08-957-425-9
US-08-957-425-9
Equence 9, Application US/08957425
Patent No. 6586388
GENERAL INFORMATION:
APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: /PRODUCT="OPIA"; SEQUENCE DESCRIPTION: SEQ ID NO: 9: US-09-148-925C-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 9: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
ATTORNEY/AGENT INFORMATION:
NAME: DIANA M. STEEL
REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: STK-001CP6C3
TELEPHONE: 617/248-7000
CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWI'
STREET: 53 STATE STREET
                                                                PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                       124 INPETVPKPCCAPTQLNAIS 143
                                                                                                                                                                                                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 169 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/600,024
FILING DATE: 18-CCT-1990
APPLICATION NUMBER: US 07/599,543
FILING DATE: 18-CCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 23-FEB-1989
APPLICATION NUMBER: US 07/660,162
FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 07/422,699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/483,913
FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 07/179,406
FILING DATE: 08-APR-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 07/616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 0 FILING DATE: 20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/810,560 FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
FILING DATE: 4-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 07/232,630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 07/621,988
                                                                                                                                 OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 111; DB 4; 100.0%; Fred. No. 9.1e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-AUG-1988
WUMBER: US 0
                        HURWITZ & THIBEAULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07/315,342
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 169;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
  RESULT 94
US-09-271-970-8
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                                                                                                                                                                                                                                                                             US-08-957-425-9
                                                                                                                                                                                 Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 9: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 422,613
APPLICATION NUMBER: US 315,342
APPLICATION NUMBER: US 315,342
APPLICATION NUMBER: US 232,630
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 108-APR-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:

APPLICATION UNMBER: US/08/447,570

FILING DATE: 21-FEB-1992

APPLICATION NUMBER: US 810,560

FILING DATE: 20-DEC-1991

APPLICATION NUMBER: US 827,052

FILING DATE: 20-DEC-1992

APPLICATION NUMBER: US 660,162

FILING DATE: 22-FEB-1991

APPLICATION NUMBER: US 660,162

FILING DATE: 22-FEB-1991

APPLICATION NUMBER: US 621,988

FILING DATE: 04-DEC-1990

APPLICATION NUMBER: US 621,849

FILING DATE: 04-DEC-1990

APPLICATION NUMBER: US 621,849
                                                                                                                                                                                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Flopp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000
                                                                                             124 INPETVPKPCCAPTQLNAIS 143
                                                                                                                        1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 04-DEC-1990
APPLICATION NUMBER: US 616,374
FILING DATE: 21-NOV-1990
APPLICATION NUMBER: US 600,024
FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 599,543
                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/957,425 FILING DATE: 24-Oct-1997 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: CRP-001CP6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 07-SEP-1990
APPLICATION NUMBER: US 569,920
FILING DATE: 20-AUG-1990
APPLICATION NUMBER: US 483,913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: BOSTON
STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: U.S.A.
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                                                                                                                                                                                    100.0%;
ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      loppy disk
                                                                                                                                                                                    0
                                                                                                                                                                                 Score 111; DB 4;
Pred. No. 9.1e-08;
0; Mismatches 0;
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                                                                                                                                                                                                                               Length 169;
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RESULT 96
US-08-621-803-257
; Sequence 257, Application US/08621803
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: PRT
; ORGANISM: Human
US-09-760-397-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 95
US-09-760-397-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; SEQ ID NO 8
; LENGTH: 178
; TYPE: PRT
; TYPE: PRT
; ORGANISM: Human
US-09-271-970-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
APPLICANT: Gavit, Patrick D.
TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
FILE REFERENCE: 1103/11041US01
CURRENT APPLICATION NUMBER: US/09/760,397
CURRENT FILING DATE: 2001-01-12
PRIOR APPLICATION NUMBER: 09/271,970
PRIOR FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 8
                                                                                                                          Patent No. 5851802
GENERAL INFORMATION:
APPLICANT: Better, M
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 8, Application US/09760397 Patent No. 6500648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 8, Application US/09271970 Patent No. 6242219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/271,970
CURRENT FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
FILE REFERENCE: 1103/11041US01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Ver. 2.0
                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                          NUMBER OF SEQUENCES:
               CITY: Chicago
STATE: Illinois
COUNTRY:
                                                      STREET:
                                                                       ADDRESSEE:
                                                                                                                                                                                                                                                                                                             116 INPETVPKPCCAPTQLNAIS 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     116 INPETVPKPCCAPTQLNAIS 135
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                                                    E: Marshall, O'Toole, 6300 Sears Tower, 233
 United States of America
                                                                                                                                                               Better, Marc D.
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                                                                                                        Methods for Recombinant Microbial Production Fusion Proteins and BPI-Derived Peptides 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 111; DB 3; 100.0%; Pred. No. 9.6e-08;
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                                                    Gerstein, Murray & Borun
South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                      DB 4; Length 178;
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 US-08-621-803-261
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 179 amin
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Best Local Similarity
Matches 20; Conserv
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NAME: BOXUN, Michael F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 2712
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                    TELEFAX: 312/474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 179 amino acids
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/621,803
FILING DATE: 22-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
                     MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION:
                                                                                                                            IECONIC. 312/4.
TELEPHONE: 312/4-0448
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TELEFAX: 312/474-0448
                                      TOPOLOGY:
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Tower, 233
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READABLE FORM

Query Match

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Score 111;

DB 2;

Length 179;

Matches

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RESULT 98
US-09-217-352-257
US-09-217-352-257
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US-09-217-352-257
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US-09-217-352-261
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                                                                                                                     Sequence 261, Application US/09217352
Patent No. 6274344
GENERAL INFORMATION:
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Matches
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GENERAL INFORMATION:
APPLICANT: Better
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SEQUENCE CHARACTERISTICS:
LENGTH: 179 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/62
FILING DATE: 22-MAR-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: 312/474-6300
                                             TITLE OF INVENTION: Met TITLE OF INVENTION: Fus NUMBER OF SEQUENCES: 26 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA:
                                                                                                           APPLICANT:
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TELEFAX:
25-3856
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                             Local Similarity
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                                ADDRESSEE:
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                 E: Marshall, O'Too
6300 Sears Tower,
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                                                                                                           Better, Marc D
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                                                                            Methods for Recombinant Microbial Production Fusion Proteins and BPI-Derived Peptides
                 , O'Toole,
Tower, 233
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Tower, 233
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                 Gerstein, Murray & Borun
South Wacker Drive
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South Wacker Drive
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                                                                 RESULT 101
US-09-760-397-14
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US-09-271-970-14
                                                                                                                                                                                                                                                     ; ORGANISM: Human · US-09-271-970-14
                                                                                                                                                                                                                                                                                 SEQ ID NO 14
LENGTH: 190
TYPE: PRT
                                  Sequence 14, App. Patent No. 65006
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Patent No. 624221
                                                                                                                                                                                                      Query Match
Best Local (
    APPLICANT: Better, Marc D.
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TYPE: a
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                                                                                                                                                                                                         Similarity
                                                  Application US/09760397
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Query Match
Best Local Similarity
Matches 20; Conserve
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APPLICANT: Better, Marc D.
APPLICANT: Better, Patrick D.
APPLICANT: Gavit, Patrick D.
TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
FILE REFERENCE: 1103/11041US01
                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/271,970
CURRENT FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin Ver. 2.0
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
SEQUENCE CHARACTERISTICS
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Batentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/217,352
ETITTED TAREST
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APPLICATION NUMBER:
FILING DATE: 22-MAR-
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
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116 INPETVPKPCCAPTQLNAIS 135
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                         1 INPETVPKPCCAPTQLNAIS 20
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                                                                 Conservative
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ilarity 100.0%;
Conservative C
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                                                                   Score 111; DB 3
Pred. No. 1e-07;
Mismatches
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Pred. No. 9.6e-08;
Mismatches 0;
                                                                                                    DB 3;
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                                                                                                    Length 190;
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; LENGTH: 190
; TYPE: PRT
; ORGANISM: Human
US-09-760-397-14
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PRIOR FILLING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 14
                                                                                                                                                                                                                                                                                                                                                                       ; MOLECULE TYPE: US-08-621-803-255
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Best Local S
Matches 20
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Best Local (
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APPLICANT: Better, Marc D.
TITLE OF INVENTION: Method
TITLE OF INVENTION: Fusior
NUMBER OF SEQUENCES: 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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CURRENT FILING DATE: 2001-01-12
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TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
FILE REFERENCE: 1103/11041US01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UNBER: US/08/621,803
FILING DATE: 22-MAR-1996
ATTORNEY/AGENT INFORMATION:
NAME: Borun, Michael F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27129/33199
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
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5851802
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                                                                                                               INPETVPKPCCAPTQLNAIS 135
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100.0%; Pred. No. 1e-07;
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Pred. No. 1e-07;
); Mismatches
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                                                                                                                                                                                                                                                                                                               DB 2;
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                                                                                                                                                                                                                                                                                                               Length 194;
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US-09-217-352-255
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COUNTAIN COMPANY OF THE PROPERTY OF THE PROPER
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall,
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Illinois

6300 Sears Tower,

O'Toole, fower, 233

Gerstein, Murray & Borun South Wacker Drive

Marc D

Methods for Recombinant Microbial Production Fusion Proteins and BPI-Derived Peptides

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US-09-217-352-255
                                                                              Query Match
Thocal Similarity
Thocal Similarity
                                                                                                                                                                                                                                                                                                            NAME: BOYUN, Michael F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 2712
TELECOMPUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                            MOLECULE TYPE:
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FILING DATE: 22-MAR-1996
ATTORNEY/AGENT INFORMATION:
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TITLE OF INVENTION: Method
TITLE OF INVENTION: Fusior
                                                                                                                                                                                              TOPOLOGY:
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116 INPETVPKPCCAPTQLNAIS 135
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5. 6274344
                                     1 INPETVPKPCCAPTQLNAIS 20
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                                                                              Conservative
                                                                                                                                                                          protein
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                                                                                             100.0%; Score 111; DB 3
100.0%; Pred. No. 1e-07;
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Best Local S
Matches 20
Query Match
Best Local Similarity
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SEQUENCE CHARACTERISTICS:
LENGTH: 195 amino acid
                                                                                                   INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 195 amino acids
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FILING DATE: 22-11.
ATTORNEY/AGENT INFORMATION:
NAME: Borun, Michael F.
NAME: Borun, MIMBER: 25,447
                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Better, TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/0 FILING DATE: 22-MAR-1996 FTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27129/33199
                                                                        TOPOLOGY:
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>: 6274344
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amino acid
                                                                                  amino acid
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: United States of America
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6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                              312/474-0448
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100.0%;
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100.0%; Pred. No. 1
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                                                                                                                                                                                                        27129/33199
 Score 111; DB 3;
Pred. No. 1e-07;
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               Length 195
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US-07-841-646-11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/07/841,64
FILING DATE: 1920221
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
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APPLICATION NUMBER: US
FILING DATE: 21-NOV-19:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
APPLICATION NUMBER: US
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                                                                                                                           FILING DATE: US 579,865
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 569.970
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660,162
PILING DATE: 22-FEB-1991
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                            PILING DATE: 20-AUG-
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                           FILING DATE: 18-OCT-
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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PRIOR APPLICATION DATA:
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                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                            APPLICATION NUMBER: US 599,543
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                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
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53 STATE STREET
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RUEGER, DAVID C.
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04-DEC-1990
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                                                                              MBER: US 483,913
22-FEB-1990
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"THANGAVEL
                                              US 422,613
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US 315,342
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RESULT 107
US-08-147-023-11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent No. 5468845
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR 1988
ATTORNEY_AGENT INFORMATION:
NAME: PICCHER, EDMUND R.
                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IEM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWI'
STREET: 53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 317 amino acids
TYPE: AMINO ACID
                                                                             FILING DATE: 28-JAN-1992

RIOR APPLICATION DATA:

APPLICATION UNMERE: US 660,162

FILING DATE: 22-FEB-1991
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 23-FEB-1989
PRIOR APPLICATION DATA:
                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: PANG, R
                                                                                                                                                                                                                                     APPLICATION NUMBER: US/0 FILING DATE: 21-FEB-1992 CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER: 27,8
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       272 INPETVPKPCCAPTQLNAIS 291
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                                                                                                                                                                                                                                                                                                                                                                                                                MASSACHUSETTS: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/08147023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 111; DB 1; Length 317; ilarity 100.0%; Pred. No. 1.7e-07; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OZKAYNAK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KUBERASAMPATH, THANGAVEL
            : 04-DEC-1990
TION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ENGIN
                                              US 621,988
                                                                                                                                                                                                                                                                       US/08/147,023
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       , TOPOLOGY: linear
, MOLECULE TYPE: protein
US-08-147-023-11
                                                                                                                                                                                                                                                                            RESULT 108
US-08-447-570-11
                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                         Patent No. 5714589
                                                                                                                                                                                                                                                              Sequence 11,
                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: OPPERM
APPLICANT: OZKAYN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 617/248-7100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 317 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 1
FILING DATE: 20-AUG-
PRIOR APPLICATION DATA:
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                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
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                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE: 07-SE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: PITCHER, EDMUND R
 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                 272 INPETVPKPCCAPTQLNAIS 291
                                                                                                                                                                                                                                                                                                                                                                                                                      20;
                                                                                                                                                                                                                                                                                                                                                                                 1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          amino acid
                                                                                                                      INVENTION:
MASSACHUSETTS: U.S.A.
                                                                                                                                                                                                                                                            Application US/08447570
                                                                                                                                                    OPPERMANN, HERMANN
OZKAYNAK, ENGIN
KUBERASAMPATH, THANG
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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                                                                                                                                     PANG, ROY H.L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   617/248-7000
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APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 179,460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 422,613
PRICATION NUMBER: 17-OCT-1989
                                                                                                                                                                                                                                REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
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PRIOR APPLICATION DATA:
10.315,342
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                                                                                                                                                                                11:
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Score 111; DB 1;
Pred. No. 1.7e-07;
); Mismatches 0;
                                    Length 317;
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US-08-447-570-11
Query Match 100
Best Local Similarity 100
Matches 20; Conservative
                                                                                                                                                                                   TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 179,460 FILING DATE: 08-APR-1988 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 569,920 FILING DATE: 20-AUG-1990 PRIOR APPLICATION DATA:
                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 317 amino acids
                                                                                                                                                                                                                                      REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 579,865 FILING DATE: 07-SEP-1990 PRIOR APPLICATION DATA:
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FILING DATE: 18-OCT-1990
PRIOR APPLICATION DATA:
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FILING DATE: 21-FEB-1992
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 15-AUG-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
FILING DATE: 21-NOV-
PRIOR APPLICATION DATA:
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APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660,162
FILING DATE: 22-FEB-1991
                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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APPLICATION NUMBER:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 422,613 FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 483,913 FILING DATE: 22-FEB-1990
                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
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                                                                                                                                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
                                                                                                                             amino acid
                                                                                       TYPE: protein
                                                                                                                                                                                                                                                                                             PITCHER,
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04-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                           UMBER: US 315,342
23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                         15-AUG-1988
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               100.0%;
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                 Score 111; DB 1;
Pred. No. 1.7e-07;
 Mismatches
                                 Length 317;
 Indels
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Gaps
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RESULT 109
US-08-449-700-11
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                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 530

PRIOR APPLICATION DATA:
APPLICATION DATA:
US 810,560
FILING DATE: 20-DEC-1991
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION UNMER: US 827,052
FILING DATE: 28-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION UNMER: US 660,162
PRIOR APPLICATION DATA:
APPLICATION UNMER: US 621,988
FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION UNMER: US 621,849
FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION UNMER: US 621,849
FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION UNMER: US 616,374
FILING DATE: 21-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION UNMER: US 600,024
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APPLICATION NUMBER: US
FILING DATE: 20-AUG-11:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
APPLICATION NUMBER: US
                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 599,543
FILING DATE: 18-0CT-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 579,865
FILING DATE: 07-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                FILING DATE: 22-FEB-
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDÉNCE ADDRESS:
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FILING DATE: 21-FEB-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPPERMANN, ENGIN
OZKAYNAK, ENGIN
THANGAVEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KUBERASAMPATH, TRUEGER, DAVID C.
                                                              UMBER: US 422,613
17-OCT-1989
MBER: US 315,342
23-FEB-1989
                                                                                                                           MBER: US 483,913
22-FEB-1990
                                                                                                                                                                                          JMBER: US 569,920
20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ROY H.L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OSTEOGENIC DEVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HURWITZ & THIBEAULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US/08/449,700
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```

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 1'
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:

PITCHER, EDMUND

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 2
FILING DATE: 15-AUG-1988

; INFORMATION FOR SEQ ID NO: 11
; SEQUENCE CHARACTERISTICS:
; LENGTH: 317 amino acids
; TYPE: amino acid
; TYPE: protein
US-08-449-700-11

TELEPHONE:

617/248-7100

617/248-7000

뭣

-08-449-699A-11

equence 11,

tent No.

GENERAL INFORMATION:

OZKAYNAK,

ENGIN

COMPUTER READABLE FORM: MEDIUM TYPE: Floppy

02110

CLASSIFICATION:

CORRESPONDENCE ADDRESS

RUEGER, UNITE

STREET:

BOSTON

MASSACHUSETTS

U.S.A.

ADDRESSEE:

TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 317 amino acid

amino acid Y: linear

317 amino acids

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Best Local Similarity 100.0%; Score 111; Matches 20; Conservative
                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/147,023
FILING DATE: 01-NOV-1993
ATTORNEY/AGENT INFORMATION:
NAME:
                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UNDER 1/08/1/08/1/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR.
TELECOMMUNICATION INFORMATION:
                                                                                             NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: STI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TILE OF INVENTION: ANTIBODIES TO OSTEOGENIC PROTEINS UMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/449,699A FILING DATE: 24-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    272 INPETVPKPCCAPTQLNAIS 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               : TESTA, HURWITZ & THIBEAULT
125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KUBERASAMPATH, THE RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US 179,460
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                                                                                                                                              STK-001CP6CN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 111
US-09-148-925C-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 11, Applicati Patent No. 6551995 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 V Match 100.0%;
Local Similarity 100.0%;
nes 20; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UNMER: US/09/148,925C
FILING DATE: 04-Sep-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: OPPERMANN, HERMANN
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     272 INPETVPKPCCAPTQLNAIS 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PANG, ROY H.L.
ITLE OF INVENTION: OSTEOGENIC DEVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
APPLICATION NUMBER: US 08/147,023
APPLICATION NUMBER: US 08/147,023
APPLICATION NUMBER: US 07/841,646
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 07/579,865
FILING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
                                                                                                  APPLICATION NUMBER: US 07/599,543
FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/616,374
FILING DATE: 21-NOV-1990
                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/810,560 FILING DATE: 20-DEC-1991 APPLICATION NUMBER: US 07/569,920 FILING DATE: 20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: MASSACHUSETTS
                                                           APPLICATION NUMBER: US
FILING DATE: 22-FEB-19:
                                                                                                                                                                                     APPLICATION NUMBER: US 07/600,024 FILING DATE: 18-OCT-1990
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                                      APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/09148925C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DRESSEE: TESTA, HURWITZ & THIBEAULT
REET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KUBERASAMPATH, TI
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                      07/179,406
                                                                                07/483,913
07/232,630
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.7e-07;
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Page 45

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RESULT 112
US-08-957-425-11
; Sequence 11, Application
; Patent No. 6586388
; Patent INFORMATION:
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Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: 617/248-7000
TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                              CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: STK-001CP6C3
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: DIANA M. STEEL
                                                                                                                                       PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: /product="OP1B" SEQUENCE DESCRIPTION: SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 317 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      272 INPETVPKPCCAPTQLNAIS 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 INPETVPKPCCAPTQLNAIS 20
                  APPLICATION NUMBER: US/08/447,570 FILING DATE: 21-EEB-1992 APPLICATION NUMBER: US 810,560 FILING DATE: 20-DEC-1991 APPLICATION NUMBER: US 827,052 FILING DATE: 28-JAN-1992
                                                                                                                                     APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
CLASSIFICATION: CUNKNOWN>
( APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                        CITY: BOSTON
STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                 STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 07/422,699
FILING DATE: 17-0CT-1999
APPLICATION NUMBER: US 07/422,613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 07/315,342 FILING DATE: 23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                       COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/08957425
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                                                                                                                                                                                                                                                                                                                                                                                                                                    DDRESSEE: TESTA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 111; DB 4; ilarity 100.0%; Pred. No. 1.7e-07; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OPPERMANN, ENGIN OZKAYNAK, ENGIN THANGAVEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KUBERASAMPATH, T
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DIANA M. STEEL
                                                                                                                                                                                                                                                                                                                                                                                                               53 STATE STREET
  NUMBER: US 660,162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ROY H.L
                                                                                                                                                                                                                                                                                                                                                                                                                                    HURWITZ & THIBEAULT
                                                                                                                                                                                                                                     Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 317;
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US-07-764-731B-10
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                                                                                                                                                                                                                                                                                                                                                                        Sequence 10, Application US/07764731B Patent No. 5366875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Rosen, Vicki A.
APPLICANT: Wang, Elizabeth A.
APPLICANT: Wozney, John M.
TITLE OF INVENTION: Methods for Producing EMP-7 Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS:
ZIF: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FORM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Legal Affairs, Genetics Institute, Inc
STREET: 87 CambridgePark Drive
                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 315,342

FILING DATE: 23-FEB-1989

APPLICATION NUMBER: US 212,630

FILING DATE: 15-AUG-1988

APPLICATION NUMBER: US 179,460

FILING DATE: 08-APR-1988

ATTORNEY/AGENT INFORMATION:

NAME: PITCHER, EDMIND R.
                                                                                                                                     COUNTRY:
                                                                                                                                                                            CITY: Cambridge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              272 INPETVPKPCCAPTQLNAIS 291
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 317 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 22-FEB-
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 18-OCT-
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 621,849 FILING DATE: 04-DEC-1990 APPLICATION NUMBER: US 616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 483,913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 07-SEP-1990
APPLICATION NUMBER: US 569,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 599,543
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 21-NOV-1990
APPLICATION NUMBER: US 600,024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ILING DATE: 22-FEB-1990
PPLICATION NUMBER: US 4
ILING DATE: 17-OCT-1989
                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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NUMBER: US 621,988
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
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Pred. No. 1.7e-07
0; Mismatches 0
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US-07-841-646-15
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                                                                                                                                                                                                               SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/07/841,646
FILING DATE: 19920221
CLASSIFICATION DATA:
APPLICATION NUMBER: US 810,560
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
FILING DATE: 28-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15, Patent No. 5
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 617-876-5851
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660,162
FILING DATE: 22-FEB-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 621,988
FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-876-1170
FILLING FATA:
PRIOR APPLICATION NUMBER: US 616,374
APPLICATION NUMBER: 21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 53 S'CITY: BOSTON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 19910 CLASSIFICATION: 43
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                                                                             APPLICATION NUMBER:
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AMINO ACID
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RUEGER, DAVID C.
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                                                                04-DEC-1990
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100.0%; Pred. No. 2.2e-07;
trive 0; Mismatches 0;
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US-08-147-023-15
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Best Local Similarity
Matches 20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 408 amino acid
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 179,46
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSE: TESTA, HURWITZ & THIBEAULT STREET: 53 STATE STREET
CORRESTS: 53 STATE STREET
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
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PRIOR APPLICATION DATA:
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PRIOR APPLICATION DATA:
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PRIOR APPLICATION DATA:
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APPLICATION NUMBER:
             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
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                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                             363 INPETVPKPCCAPTQLNAIS 382
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                                                                     02109
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                                                                                  MASSACHUSETTS: U.S.A.
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RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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07-SEP-1990
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22-FEB-1990
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20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 111; DB 1; 100.0%; Pred. No. 2.2e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US 232,630
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                                                             Matches
                                                                            Query Match
Best Local
                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO:
                                                                                                                                        TOPOLOGY: 11
                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 408 amino acid
                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                            FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
FILING DATE: 18-OCT-
PRIOR APPLICATION DATA:
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PRIOR APPLICATION DATA:
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APPLICATION NUMBER: 1
FILING DATE: 22-FEB-
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REFERENCE/DOCKET NUMBER: CRP-001CP6
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                                                             20;
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                                                                            Similarity
                                                                                                                                                                        amino acid
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DATE: 20-AU
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DATE: 07-SEP-1990
 INPETVPKPCCAPTQLNAIS 382
                              INPETVPKPCCAPTQLNAIS 20
                                                          100.0%; Score 111; DB 1; ilarity 100.0%; Pred. No. 2.2e-07 Conservative 0; Mismatches 0
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                                                                                                                                                                                                                                      617/248-7100
                                                                                                                                        protein
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04-DEC-1990
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15-AUG-1988
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18-OCT-1990
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20-AUG-1990
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In Release #1.0, Version #1.25
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                                                                                           DB 1; Length 408;
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RESULT 116
US-08-447-570-15
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Sequence 15, App...
                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US
FILING DATE: 04-DEC-15
FRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 21-NOV-15
                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 18-OCT-15
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
                                                              FILING DATE: 17-OCT-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 422,613
                                                                                                                                                                                                                FILING DATE: 07-SEP-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 50
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PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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FILING DATE: 04-DEC-
PRIOR APPLICATION DATA:
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PRIOR APPLICATION NUMBER: US 660,162
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                FILING DATE: 23-FEB-1989 PRIOR APPLICATION DATA:
                                                                                                                                                                 FILING DATE: 20-AUG-
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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                                                                                                                                 FILING DATE: 22-FEB-PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 536 PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 28-JA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 20-DEC
APPLICATION NUMBER: US 232,630 FILING DATE: 15-AUG-1988
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53 STATE STREET
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OZKAYNAK, ENGIN
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                                                                                                                                                                                                   UMBER: US 569,920
20-AUG-1990
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                                                                                                                                                                                                                                                                                                     UMBER: US 599,543
                                                                                                                                                   JMBER: US 483,913
22-FEB-1990
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18-OCT-1990
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21-NOV-1990
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28-JAN-1992
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TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-447-570-15
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INFORMATION FOR SEQ ID NO: 15:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Patentin Release #1.0, Verocream Application DATA:
APPLICATION NUMBER: US/08/449,700
FILING DATE: 21-FEB-1992
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
PRIOR APPLICATION DATA:
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                                                                                                                                                                                                          APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660,162
FILING DATE: 22-FEB-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 621,988
FILING DATE: 04-DEC-1990
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LENGTH: 408 amino acid
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REFERENCE/DOCKET NUMBER: CRP-001CP6
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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                                                                                                                                    FILING LALL.
PRIOR APPLICATION DATA:
OFFICE OF THE PRIOR 
                                                                      PRIOR APPLICATION DATA:
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                                                                                                     APPLICATION NUMBER: FILING DATE: 04-DEC
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APPLICATION NUMBER: US 616,374 FILING DATE: 21-NOV-1990
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08-APR-1988
                                                                                                             04-DEC-1990
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US-08-449-699A-15
                                                                                                                                                                                                                                                                                       Patent No. 5930...
Patent No. 59
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Best Local Similarity
Matches 20; Conserv
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 408 amino acids
TYPE: maino acid
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 579,865
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APPLICATION NUMBER: US 4:
FILING DATE: 17-OCT-1989
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APPLICATION NUMBER: US 3:
FILING DATE: 23-FEB-1989
PRIOR APPLICATION DATA:
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APPLICATION NUMBER:
CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HU
                                             NUMBER OF SEQUENCES: 33
                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                          APPLICANT: OPPERMANN, HERMANN APPLICANT: OZKAYNAK, ENGIN
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                                                                                                                        RUEGER, LA.
                                                                                                                                                                                                               KUBERASAMPATH,
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                                                                                                                                                                         DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 111; DB 2;
100.0%; Pred. No. 2.2e-07;
HURWITZ & THIBEAULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US 600,024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US 232,630
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

STREET:

125 HIGH STREET

COUNTRY:

MASSACHUSETTS Y: U.S.A.

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RESULT 119
US-09-148-925C-15
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US-08-449-699A-15
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 15:
                                                      CURRENT APPLICATION NUMBER: US/09/148,925C

FILING DATE: 04-Sep-1998

CLASSIFICATION VUMBER: US/09/148,925C

FILING DATE: 04-Sep-1998

CLASSIFICATION: CUNKNOWN>
PRIOR APPLICATION ON THE SEP-1998

APPLICATION NUMBER: US 09/148,925

FILING DATE: 8-SEP-1998

APPLICATION NUMBER: US 09/149,699

FILING DATE: 24-MAY-1995

APPLICATION NUMBER: US 08/147,023

FILING DATE: 1-NOV-1993

APPLICATION NUMBER: US 07/841,646

FILING DATE: 21-FEB-1992

APPLICATION NUMBER: US 07/841,646

FILING DATE: 21-FEB-1992

APPLICATION NUMBER: US 07/841,646

FILING DATE: 21-FEB-1992

APPLICATION NUMBER: US 07/841,646
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: STI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/449,699A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CENGTH:
                                                                                                                                                                                                                                                                                                                                                                             ZIP: 021110
COMPUTER READABLE FORM:
MEDLUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWI
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 363 INPETVPKPCCAPTQLNAIS 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 INPETVPKPCCAPTQLNAIS 20
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                         FILING DATE: APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: MASSACHUSETTS COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PITCHER, EDMUND
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KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
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                         NUMBER: US 07/579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ROY H.L
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
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                                                                                                                                                                                                              RESULT 120
US-08-957-425-15
; Sequence 15, Application
; Sequent No. 6586388
; Patent No. 6586388
; GENERAL INFORMATION:
; APPLICANT: OPPERI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 15: SEQUENCE CHARACTERISTICS:
CORRESPONDENCE ADDRESS:
ADDRESSEE TESTA, HURWITZ & THIBEAULT
STREET: 53 STATE STREET
CITY: BOSTON
                                                                                    PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: ST
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: /product="OP1D" SEQUENCE DESCRIPTION: SEQ ID NO: 15:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                             INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 408 amino acids
TYPE: amino acid
TOPOLOGY: linear
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APPLICATION NUMBER: US 0
FILING DATE: 17-OCT-1989
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                                                                                                                                                                                                                                                                                Application US/08957425
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APPLICATION NUMBER: US 07/422,613
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ILING DATE: 18-OCT-1990
PPLICATION NUMBER: US 07/616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 07/600,024
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ILING DATE: 4-DEC-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ING DATE: 21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ING DATE: 20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATION NUMBER: US
                                                                                                                                                                                            OPPERMANN, HERMANN
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATION NUMBER: US 07/569,920
                                                                                                                                                 KUBERASAMPATH, TRUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-FEB-1991
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                                                                                                                                                                        THANGAVEL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 408;
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                                                                                                                                            TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 15:
US-08-957-425-15
                                                                                       Query Match
Best Local S
                                                                         Matches
                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 408 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 02109
COMPUTER READABLE FORM:
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 363
                                   1 INPETVPKPCCAPTQLNAIS 20
                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
INPETVPKPCCAPTQLNAIS 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 810,560 FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/447,570 FILING DATE: 21-FEB-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                 TELEFAX: 617/248-7100
                                                                                                                                                                                                                                                                                                                                                                                             NAME: PITCHER,
                                                                                                                                                                                                                                                                                                                 TELEPHONE: 617/248-7000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PPLICATION NUMBER: US 600,024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LICATION NUMBER: US 827,052
JING DATE: 28-JAN-1992
LICATION NUMBER: US 660,162
JING DATE: 22-FEB-1991
                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ING DATE: 17-OCT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ICATION NUMBER: US 579,865
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IG DATE: 21-NOV-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATION NUMBER:
                                                                   100.0%; Score 111; DB 4; 100.0%; Pred. No. 2.2e-07; tive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                         CRP-001CP6
                                                                                                           Length 408;
                                                                         Indels
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RESULT 121 US-07-841-646-2

Sequence 2, Application US/07841646

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FILING DALL.

CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810.

TOTAL DATE: 20-DEC-1991
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TITLE OF IN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                              FILING DATE: 15-AUG-
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 483,913
FILING DATE: 22-FEB-1990
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PRIOR APPLICATION DATA:
APPLICATION UNBER: US 600,024
FILING DATE: 18-OCT-1990
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                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
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PRIOR APPLICATION DATA:
US 569,920
                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 579,865
FILING DATE: 07-SEP-1990
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ATTORNEY/AGENT INFORMATION:
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OPERATING SYSTEM:
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                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
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                                                                                                                                                                             APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E: TESTA, HURWI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KUBERASAMPATH, THE RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OZKAYNAK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PatentIn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E: Floppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                     18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-FEB-1991
                                                                                                                23-FEB-1989
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                                                                   15-AUG-1988
                                                                                                                                                            17-OCT-1989
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                                                                                                                              US 315,342
                                                                                                                                                                             US 422,613
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                                 US 179,460
                                                                                                                                                                                                                                                                                                                                                                   US 599,543
                                                                                US 232,630
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                                                                                                                              ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-07-901-703-2
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US-07-901-703-2
                                                                                                                                                                                                                             CLASSIFICATION: 435
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: STK-0
TELECOMMUNICATION INFORMATION:
TRIEDHONE: 617/248-7000
TRIEDHONE: 770 TD NO: 2:
                                                                   Matches
                                                                                  Query Match
Best Local
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Best Local Similarity 100.0%;
Matches 20; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: RUEGER, DAVID C
APPLICANT: RUEGER, THAI
APPLICANT: OPPERMANN, HERMANN
APPLICANT: OZAKANNAK, ENGIN
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: PROSTHETIC DEVICES HAVING ENHANCED TITLE OF INVENTION: OSTEOGENIC PROPERTIES NUMBER OF SEQUENCES: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
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FILING DATE: 199206
CLASSIFICATION: 435
                                                                                                                                                                                                  LENGTH:
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 386
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                                                                                   Similarity
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INPETVPKPCCAPTQLNAIS 405
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AMINO ACID
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                                 INPETVPKPCCAPTQLNAIS 20
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EXCHANGE PLACE,
                                                                   Conservative
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                                                                                100.0%;
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PLACE, 53 STATE STREET
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                                                                                Score 111; DB 1; Length 431; Pred. No. 2.3e-07;
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RESULT 123

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RESULT 124
US-08-147-023-2
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TELEPHONE: (617) 876-1170 X4
TELEPAX: (617) 876-5851
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4, Application US/07539756 Patent No. 5364839
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GENERAL INFORMATION:
GERHART, TOBIN N.
APPLICANT: GERHART, TOBIN N.
APPLICANT: WANG, ELIZABETH A.
APPLICANT: WANG, ELIZABETH A.
APPLICANT: WARY JO
APPLICANT: WILL, MARY JO
APPLICANT: WILL, WILL
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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ATTORNEY/AGENT INFORMATION:
ANAME: MCDANIELS, PATRICIA A.
REGISTRATION NUMBER: 33,194
REFERENCE/DOCKET NUMBER: GI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/539,756
FILING DATE: 1990618
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: OPPERMANN, HERMA
APPLICANT: OZKAYNAK, ENGIN
APPLICANT: KUBERASAMPATH, TI
APPLICANT: RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: protein
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CORRESPONDENCE ADDRESS:
ADDRESSEE: GENETICS INSTITUTE,
                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: RUEGER, DAVID C.
APPLICANT: PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                          STREET: 53 ST
CITY: BOSTON
STATE: MASSAC
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Local Similarity 100.0%;
nes 20; Conservative 0
                                                                                                                                                                                                 COUNTRY:
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Pred. No. 2.3e-07;
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; MOLECULE TYPE:
US-08-147-023-2
                                                                                            Query Match
Best Local Similarity
                                                                              Matches
                                                                                                                                                                                                                               TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 179,
FILING DATE: 08-APP-1007
ATTORNEY/
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PRIOR APPLICATION NUMBER: US 621,988
APPLICATION NUMBER: 04-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DALL.
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810,560
APPLICATION PARE: 20-DEC-1991
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FILING DATE: 21-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 600,024
FILING DATE: 18-OCT-1990
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 22-FEB-1990
PRIOR APPLICATION NUMBER: US 422,613
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PRIOR APPLICATION NUMBER: US 483,913
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APPLICATION NUMBER: US 621,849
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PRIOR APPLICATION DATA:

PRIOR APPLICATION UNIMBER: US 827,052
                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000
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APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
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APPLICATION NUMBER:
FILING DATE: 23-FEB-
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FILING DATE: 07-SEP-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 56
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660,162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                               NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
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                                                                                                                                                                                                               LENGTH:
              386 INPETVPKPCCAPTQLNAIS 405
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                                            INPETVEKECCAPTOLNAIS 20
                                                                                                                                                                                                                431 amino acids
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                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PatentIn Release #1.0, Version #1.25
                                                                                                                                                             protein
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                                                                                            100.0%; Score 111; DB 1; 100.0%; Pred. No. 2.3e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US 569,920
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US 315,342
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                                                                                Mismatches
                                                                                                            Length 431;
                                                                                Indels
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US-08-206-864-2
                                                                                                                                                RESULT 126
US-08-278-729A-17
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                                                                                                                                                                                                                                                                                                                                                   ; MOLECULE TYPE: protein US-08-206-864-2
                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 20; Conserv
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GENERAL INFORMATION:
                                                                                                                Sequence 17, Patent No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO:
                                                              GENERAL INFORMATION:
APPLICANT: SMART,
APPLICANT: OPPERM
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 21-FEB-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 431 amino acids TYPE: amino acid TOPOLOGY: linear
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ZIP: 01748
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JONES, WILLIAM K
TUCKER, RONALD F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KUBERASAMPATH,
PANG, ROY H.L
                                                                                  SMART, JOHN
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FILING DATE:
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 04-MAR-1993
PRIOR APPLICATION NUMBER: US 07/
APPLICATION NUMBER: US 07/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/206,864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 27,829
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STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: CR
LECOMMUNICATION INFORMATION:
TELEPHONE: 617/7000
                                                                                                                                                                                                                                                  386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                           7, Application US/08278729A
5650276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INVENTION: METHODS AND COMPOSITIONS FOR INVENTION: RECOMBINANT OSTEOGENIC PROTEIN PRODUCTION
                                                                                                                                                                                                                                                                                INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/08206864
OPPERMANN, HERMAN
OZKAYNAK, ENGIN
KUBERASAMPATH, TH
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                           100.0%; Score 111; DB 1; ilarity 100.0%; Pred. No. 2.3e-07; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPPERMANN, HERMANN
OZKAYNAK, ENGIN
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                                                                HERMAN
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                         THANGAVEL
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RESULT 127
US-08-480-528A-4
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TITLE OF INVENTION: MORI
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
          SOFTWARE: Patentin Release #1.0, V CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/480,528A FILING DATE: 07-UUN-1995
CLASSIFICATION: 435
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC comparible
COMPUTER: FOR PC comparible
COPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION UMBER: US/08/278,729A
FILING DATE: 20-UUI-1994
CLASSIFICATION: 435
CLASSIFICATION: 435
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NAME: PITCHER ESG., EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-058CPFW
TELECOMMUNICATION INFORMATION:
TELEPHONE: (508) 435-9001
                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: protein
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
STREET: 45 SOUTH STREET
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                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
ODERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                              PLICANT: COHEN, CHARLES M.
TILE OF INVENTION: OP3-INDUCED MORPHOGENESIS
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CITY: HOPKINTON
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RUEGER, DAVID C.
PANG, ROY H.L.
COHEN, CHARLES M.
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                                                                                                                                                                                                                      USA
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OZKAYNAK, ENGIN
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VENTION: MORPHOGENIC PROTEIN SCREENING METHOD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HERMANN
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                                                                                                  Version #1.30
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                                                                                                         Best Local Similarity Matches 20; Conserv
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                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: (508) 435-90
TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/479,666
FILING DATE: 07-UN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
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REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                               TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (508) 435-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: OP3-INDUCED MORPHOGENESIS NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
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CITY: I
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1 INPETVPKPCCAPTQLNAIS 20
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45 SOUTH STREET.
                                                                                                     100.0%; Score 111; DB 1; illarity 100.0%; Pred. No. 2.3e-07; Conservative 0; Mismatches 0;
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ilarity 100.0%;
Conservative 0
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RUEGER, DAVID C.
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COHEN, CHARLI
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OPPERMANNN, HELL
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Pred. No. 2.3e-07;
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                                                                                                                                                                                 Length 431;
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RESULT 13:0
US-08-406-672-17
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                                                                                                                                                                                                                                                            Sequence 17,
                                                                                                                                                                                                                                        Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REGISTRATION NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LEW PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
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LENGTH: 431 amino acids
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ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/155,343A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
Local Similarity 100.0%;
hes 20; Conservation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TLE OF INVENTION: MORPHOGENIC-INDUCED PERIODONTAL TISSUE (TLE OF INVENTION: REGENERATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 15-NOV
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                                                   LICANT: KUBERASAMPATH, THANGAVEL
LICANT: COHEN, CHARLES M.
LICANT: OPPERMANN, HERMANN
LICANT: OPPERMANN, ENGIN
LICANT: RUEGER, DAVID C.
LICANT: PANG, ROY H.L.
LICANT: PANG, ROY H.L.
LICANT: PANG, ROY H.L.
LICANT: PANG, ROY H.L.
LICANT: TREATMENT TO PREVENT LOSS OF AND/OR
LE OF INVENTION: INCREASE BONE MASS IN METABOLIC BONE
BER OF SEQUENCES: 33
                                       ESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     386 INPETVPKPCCAPTQLNAIS 405
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PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES SOUTH STREET
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Pred. No. :
                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 431;
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                                                                            BONE DISEASES
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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APPLICATION NUMBER: US 6:
FILING DATE: 11-MAR-1991
ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: U
FILING DATE: 30-AUG-1
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                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
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les 20; Conservative
                     APPLICATION NUMBER: US/08/643,563A FILING DATE: 06-MAY-1996
                                                                                                                                                                                                                                                                                                                     TLE OF INVENTION: MORPHOGENIC PROTEIN SCREENING METHOD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/0 FILING DATE: 20-MAR-1995
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         CLASSIFICATION:
                                                                                                                                                                                         COUNTRY:
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ISTRATION NUMBER: 36,508
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                                                                                                                                                                                                                                          BATENT ADMINISTRATOR, CREATIVE BIOMOLECULES 45 SOUTH STREET
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OZKAYNAK, ENGIN
                                                                                                                                                                                         USA
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RUEGER, DAVID C.
PANG, ROY H.L.
                                                                                                                                                                                                                                                                                                                                        COHEN, CHARLES M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         NHOL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US 667,274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US 752,857
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                                                                                                                                                                                                                                                                                                                                                                                                                                     HERMAN
                                                                                                                                                                                                                                                                                                                                                                                                THANGAVEL
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Gaps

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RESULT 132
US-08-447-570-2
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent No. 5714589
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INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LEWGTH: 431 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 04103
COMPUTER READBLE FORM:
CMEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
CURRENT APPLICATION NUMBER: US/08/447,570
                                                                                                                                                                                                                                                                             APPLICATE: 20-DECT.
FILING DATE: 20-DECT.
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 827,052
APPLICATION NUMBER: 28-JAN-1992
                                                                                                                                                                                                                                                                                                                                       FILING DALL.

CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810,560
APPLICATION NUMBER: US 910,560
APPLICATION NUMBER: 20-DEC-1991
PRIOR APPLICATION NUMBER: US 616,374
FILING DATE: 21-NOV-1990
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
US 600,024
                                                              APPLICATION NOTE: 04-DEC-1990
FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
CONTINUATION NUMBER: US 616,374
                                                                                                                                                     APPLICATION NUMBER: US 621,988 FILING DATE: 04-DEC-1990 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                 FILING DATE: 22-FEB-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660,162
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NAME: TWOMEY ESG., MICHAEL J.
REGISTRATION NUMBER: 38,349
REFERENCE/DOCKET NUMBER: CRP-058CN2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (508) 435-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 53 STATE STREET
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APPLICANT: OZKAYNAK, ENGIN
APPLICANT: KUBERASAMPATH, THAI
APPLICANT: RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
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20; Conserv
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                                                                                                                                                                                                                                          22-FEB-1991
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                                                                                                                                   US 621,849
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
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                                                                                                                                                                                                                                                                                                                                                                                         US-08-643-763A-17
                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 133
                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acid
                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 179,460 FILING DATE: 08-APR-1988 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 232,630 FILING DATE: 15-AUG-1988 PRIOR APPLICATION DATA:
                                                                                                                                                                                  NUMBER OF SEQUENCES: 3:
                                                                                                                                                                                                                                                                                                          APPLICANT: RUEGER,
                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 23-FEB-FRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 22-FEB-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 18-OCT-
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                      TITLE OF INVENTION:
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APPLICATION NUMBER: US 599,543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity nes 20; Conserv
                                                                                     COUNTRY: U
ZIP: 01748
SOFTWARE:
                                                                                                                     STATE:
                                                                                                                                                      STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: PITCHER, EDMUND R. REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 422,613
FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
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                                                                                                                                                                    ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             386 INPETVPKPCCAPTQLNAIS 405
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o. 5733878
                                                                                                                                      HOPKINTON
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                                                                                                                     MΑ
                                                                                                                                                    E: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
45 SOUTH STREET
                                                                                                       USA
 PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                        OPPERMANN, HERMAN
                                                                                                                                                                                                                                                        COHEN, CHARLES PANG, ROY H.L.
                                                                                                                                                                                                                                                                                                      KUBERASAMPATH, RUEGER, DAVID C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 111; llarity 100.0%; Pred. No. 2 Conservative 0; Mismatche
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20-AUG-1990
                                                                                                                                                                                                                                                                        CHARLES M.
                                                                                                                                                                                                                      REGENERATION
                                                                                                                                                                                                                                      MORPHOGENIC-INDUCED PERIODONTAL TISSUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US 315,342
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CLASSIFICATION:

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REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 111; DB 1; Best Local Similarity 100.0%; Pred. No. 2.3e-07; Matches 20; Conservative 0; Mismatches 0;
TELEFAX: (508) 435-6951
NFORMATION FOR SEQ ID NO: 17:
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NAME: FENTON ESq., GILLIAN M.
REGISTRATION NUMBER: 36,508
                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIOM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
STREET: 45 SOUTH STREET
CITY: HOPKINTON
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APPLICATION NUMBER: US/08/643,763A
FILING DATE: 06-MAY-1996
                                                            NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CEP-
TELECOMMUNICATION INFORMATION:
                                                                                                                                                    CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/445,882
FILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/462,623 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: SMART, JOHN E.
TITLE OF INVENTION: MORPHOGEN TREATMENT OF GASTROINTESTINAL
TITLE OF INVENTION: ULCERS.
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PANG, ROY H.L.
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KUBERASAMPATH, THANGAVEL RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHARETTE, MARC F.
                                           [508) 435-9001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CRP-067CN
                                                                                            CRP-074CN
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US-08-451-953A-17
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                             US-08-459-346-2
                                                RESULT 136
                                                                                                                                                                                                                                                                                                        US-08-451-953A-17
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/451,953A
FILING DATE: 26-MAY-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER E9G:, EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-058CN
TELECOMMUNICATION INFORMATION:
TPLECOMMUNICATION INFORMATION:
TPLECOMMUNICATION INFORMATION:
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: SMART, JOHN
APPLICANT: OPPERMANN, HERMAN
APPLICANT: OZKAYNAK, ENGIN
APPLICANT: KUBERASAMPATH, THANGAVEL
APPLICANT: KUBERASAMPATH, THANGAVEL
APPLICANT: RUEGER, DAVID C.
APPLICANT: ROBER, ROY H.L.
APPLICANT: COHEN, CHARLES M.
                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         386 INPETVEKECCAPTOLNAIS 405
                                                                                                                       386 INPETVPKPCCAPTQLNAIS 405
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                                                                                                                                                      1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                               H: 431 amino acids
amino acid
CGY: linear
                                                                                                                                                                                                                                      Similarity
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GY: linear
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                                                                                                                                                                                                            100.0%; Score 111; DB 1; llarity 100.0%; Pred. No. 2.3e-07 Conservative 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (508) 435-9001
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MOLECULE TYPE: protein

LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear

Sequence 17, App.

INFORMATION:

APPLICANT:

COUNTRY: U

USA

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ELECOPE: (500)
TELEPHONE: (508)

Sequence 2, Application US/08459346 Patent No. 5834179 GENERAL INFORMATION:

Gaps

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                                                                                                                                                            RESULT 137
US-08-445-468A-17
                                                                                                          Patent No. 5849686
GENERAL INFORMATION:
                                                                                                                                           Sequence 17,
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                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: protein -08-459-346-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07
FILING DATE: 08-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 07/971,091
FILING DATE: 03-NOV-1992
PRIOR APPLICATION NUMBER: US 07/946,235
FILING DATE: 16-SEP-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/029,335
FILING DATE: 04-MAR-1993
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/459,346
   TITLE OF INVENTION:
                                                                     APPLICANT: KUBERASAMPATH, THANGAVEL APPLICANT: RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
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APPLICANT: KUBERASAMPATH, THANGAVEL
TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
TITLE OF INVENTION: OF MATTER
                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 35 SOUTH
                                                                                                                                                                                                                                                                                                                                 Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
                                                                                                                                                                                                                                      386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                           ch 100.0%; Score 111; Similarity 100.0%; Pred. No. 2 20; Conservative 0; Mismatche
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01748
                                                                                                                                                                                                                                                                                                                                                                                                                                       amino acid
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                                                                                                                                               Application US/08445468A
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35 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                          431 amino acids
                 OPPERMANN, HERMAN PANG, ROY H.L. COHEN, CHARLES M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
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TUCKER, RONALD F
RUEGER, DAVID C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPPERMANN,
                                                                                                                                                                                                                                                                                                                                                                                                                        linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-JUL-1992
MORPHOGEN-INDUCED LIVER REGENERATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US 07/923,780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US 07/938,336
                                                      HERMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27,829
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                                                                                                                                                                                                                                                                                                                               2.3e-07;
                                                                                                                                                                                                                                                                                                                                                DB 2;
                                                                                                                                                                                                                                                                                                                                              Length 431;
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RESULT 138
US-08-901-200A-4
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                                                      COUNTRY: USA
ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/901,200A
FILING DATE: 28-UUI-1997
CLASSIFICATION: 530
CLASSIFICATION: 530
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: OPPERM
APPLICANT: OZKAYN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/445,468A
FILING DATE: 22-MAY-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
ANAME: EXEMPLY RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: 17:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: MEYERS, THOMAS C.
NECTOR OF THOMAS C.
NECTOR OF THOMAS C.
                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: COHEN, O
                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMIN.
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                    STREET: 45 SOUTH
CITY: HOPKINTON
STATE: MA
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RUEGER, DAVID C.
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OZKAYNAK, ENGIN
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                                                                                                                                                                                                                                                                                                                                                                                                                         PANG, ROY H.L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US/08/445,468A
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Pred. No. 2.3e-07;
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CRP-076DV2

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SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
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                                                                                                               US-08-481-337A-10
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Best Local (
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                                                      Matches
                                                                 Query Match
Best Local
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                                                                                                                                                                                                TELEPHONE: (617) 248-7000
TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                        NAME: MEYERS, Thomas C.
REGISTANTIER OF 18,989
REFERENCE/DOCKET NUMBER: CR.
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: CR
                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08
FILING DATE: 02-JUN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                          MOLECULE TYPE: protein
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                                                                                                                                          TOPOLOGY:
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                                                                                                                                                                   LENGTH:
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386 INPETVPKPCCAPTQLNAIS 405
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                                                     l Similarity
20; Conserv
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                     INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
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SAMPATH, Kuber T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HELDIN,
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                                                      Conservative
                                                                                                                                            linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 111; DB 2;
100.0%; Pred. No. 2.3e-07;
tive 0; Mismatches 0;
                                                                 100.0%;
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                                                                    Score 111; DB 2;
Pred. No. 2.3e-07;
                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 431;
                                                                                  Length 431;
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                                                         Indels
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                                                        Gaps
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RESULT 140
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IRM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Batentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 41
APPLICATION TO APPLICATION NUMBER: 17-0CT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 62
FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
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                                                                                                                                                                                                                       PILLING DATE: 18-OCT-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: 28-JAN-
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CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
                                                                                                                                                                                                                                                                                                                           FILING DATE: 21-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 600,024
                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 04-DEC-1990 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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                                                                                                                                         PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
                                                                                                                                                                                                           APPLICATION NUMBER: US 5' FILING DATE: 07-SEP-1990
                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 18-OCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
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                                                                                                                         APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KUBERASAMPATH, TRUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPPERMANN, HERMANN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-JAN-1992
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                                                                         US 422,613
                                                                                                                           US 483,913
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FILING DATE: 23-FEB-PRIOR APPLICATION DATA:

APPLICATION NUMBER:

MBER: US 232,630 15-AUG-1988

CATION DATA: CON NUMBER: US 179,460 ATE: 08-APR-1988

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US-07-989-847-6
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                                                                       Matches
                                                                                      Query Match
Best Local Similarity
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Best Local Similarity
Matches 20; Conserva
                                                                                                                                                                                                  TELEFAX: 617-8/5-00-1
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
SECURITY 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 6, Application US/07989847 Patent No. 5866364
                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Kapinos, Ellen J.
REGISTRATION NUMBER: 32,245
REFERENCE/DOCKET NUMBER: GI-5
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-876-1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                           MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/989,847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Tape
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
COETTIANDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Legal Affairs, Genetics Institute, Inc
STREET: 87 CambridgePark Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein
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REGISTRATION NUMBER: 27,829
REFERENCE DOCKET NUMBER: CRI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Israel, David
APPLICANT: Wolfman, Neil M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
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COUNTRY: USA
CTP: 02140-2387
                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                              TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
CLASSIFICATION: 436
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 431 amino acids
386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 386 INPETVPKPCCAPTQLNAIS 405
                                                                     20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cambridge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
                                INPETVPKPCCAPTQLNAIS 20
                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 111; DB 2; illarity 100.0%; Pred. No. 2.3e-07; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Recombinant Bone Morphogenetic Protein
Heterodimers, Compositions and Methods of Use
30
                                                                                      100.0%; Score 111; 100.0%; Pred. No. 2
                                                                     0
                                                                                                                                                                                                                                                                                                                               GI-5192B
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                                                                     Mismatches
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                                                                     Gaps
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US-08-696-268B-4
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US-08-449-699A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/449,699A
FILING DATE: 24-MAY-1995
CLASSIFICATION ATA:
APPLICATION NUMBER: US 08/147,023
APPLICATION NUMBER: US 08/147,023
APPLICATION NUMBER: US 08/147,023
APPLICATION NUMBER: STK-001CP6CN
RECERENCE/DOCKET NUMBER: 27,829
REPERENCE/DOCKET NUMBER: 27,829
REPERENCE/DOCKET NUMBER: STK-001CP6CN
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                      Sequence 4, Application US/08696268B Patent No. 5968752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 111; DB 2; Length 431; Best Local Similarity 100.0%; Pred. No. 2.3e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/08449699A Patent No. 5958441
                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: OPPERM
APPLICANT: OZKAYN
                                                                                                                                            APPLICANT: ICHIJO, HIDENORI
APPLICANT: NISHITOH, HIDEKI
APPLICANT: SAMPATH, KUBER T.
TITLE OF INVENTION: NOVEL SIGNALLING RECEPTOR FOR
TITLE OF INVENTION: MORPHOGENIC PROTEINS
                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Testa, Hu
                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: ANTIBODIES TO OSTEOGENIC PROTEINS NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSE: TESTA, HURWITZ & THIBEAULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
STATE: M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: M.
                                                            STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                     386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                           1 INPETVPKPCCAPTQLNAIS 20
                      Boston
: MA
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                                                              125 High St.
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KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPPERMANN, HERMANN
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                                                                                  Hurwitz &
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ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk

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US-08-461-397A-17
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REGISTRATION NUMBER: 36,989
REFERENCE DOCKET NUMBER: CR-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
TELEPAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/461,397A
FILING DATE: 05-JUN-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-074FW2
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEFAX: 617/248-7100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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Best Local
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: PATENTIA Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
STREET: 45 SOUTH STREET
CITY: HOPKINTON
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: SMART, JOHN E.
TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING
TITLE OF INVENTION: PROLIFERATION OF EPITHELIAL CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/696,268B FILING DATE: CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGTH:
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KUBERASAMPATH,
RUEGER, DAVID C
                                                                                                                                                                                                                                                                                                                                               USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OPPERMANN, HERMANN
PANG, ROY H.L.
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHARETTE, MARC F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 111; DB 2;
100.0%; Pred. No. 2.3e-07;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 THANGAVEL
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US-08-461-397A-17
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                                                          MOLECULE TYPE: protein US-08-912-088-17
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Best Local Similarity 100.0%;
Matches 20; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17,
 Matches:
                               Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                       TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IRM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                  FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESG., EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                           LENGTH: 431 amino acids TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH:
                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 01748
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Local Similarity es 20; Conserv
                                                                                                                                                                                      TELEPHONE:
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USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/08912088
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OZKAYNAK, ENGIN
KUBERASAMPATH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RUEGER, DAVID C.
PANG, ROY H.L.
 Conservative
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                                                                                                                                                                                        (508) 435-9001
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                100.0%; Score 111; DB 2; 100.0%; Pred. No. 2.3e-07
                                                                                                                                                                                                                                                                                                    US 08/278,729
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   THANGAVEL
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Pred. No. 2.3e-07
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      Mismatches
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                                 Length 431;
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386 INPETVPKPCCAPTQLNAIS 405

INPETVPKPCCAPTQLNAIS

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US-08-458-811-2
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GENERAL INFORMATION:
APPLICANT: KUBERASAMPATH, THANGAVEL
APPLICANT: COHEN, CHARLES M.
APPLICANT: RUEGER, DAVID C.
APPLICANT: RUEGER, DAVID C.
APPLICANT: PANG, ROY H.L.
APPLICANT: PANG, ROY H.L.
TITLE OF INVENTION: MORPHOGENIC-ENRICE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-278-730A-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 146
US-08-278-730A-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/278,730A
FILING DATE: 20-JULY-1994
CLASSIFICATION: 435
ATTORNEY/AGRAM
                                                                                                                                                                                                                                                                                                                Sequence 2, Application US/08458811 Patent No. 6027743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 111; DB 3; Best Local Similarity 100.0%; Pred. No. 2.3e-07;
                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: 1
                                                                                                                                                       NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY AGENT INFORMATION:
NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
                                                                                                                                                                                                TITLE OF INVENTION: MANUFACTURE OF AUTOGENOUS REPLACEMENT TITLE OF INVENTION: BODY PARTS
                                                                                                                                                                                                                               APPLICANT: KHOURI, ROGER K.
APPLICANT: SAMPATH, KUBER T
APPLICANT: RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                              STREET: STON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
MPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                           COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: HOPKINTON
                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                   386 INPETVPKPCCAPTQLNAIS 405
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              amino acids
                                                                              MASSACHUSETTS
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                                                                                                                   3: TESTA, HURWITZ & THIBEAULT
53 STATE STREET
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US-08-889-419-2
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REGISTRATION NUMBER: 36,989
REFERENCE/DOCKET NUMBER: CRI
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acid
                                                                CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/459,346
FILING DATE: 02-UUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: MEYERS, THOMAS C.
                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/889,419
FILING DATE: 08-JUL-1997
                                                                                                                                                                                                                                                                                                                        ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NERAL INFORMATION:
APPLICANT: JONES, WILLIAM K
APPLICANT: TUCKER, RONALD F
APPLICANT: RUEGER, DAVID C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: KUBERASAMPATH, THANGAVEL
TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
TITLE OF INVENTION: OF MATTER
NUMBER OF SEQUENCES: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: KELLEY, ROBIN D.
REGISTRATION NUMBER: 34,637
REFERENCE/DOCKST NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Patent Administrator, Testa, Hurwitz ADDRESSEE: Thibeault, LLP STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 125 P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/458,811 FILING DATE:
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                                                              THOMAS C
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Gaps

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TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-889-419-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
SOPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PACCUTION Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/445,467
                                                TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
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LENGTH: 431 amino acid
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ADDRESSEE: CREATIVE BIOMOLECULES, INC
STREET: 35 SOUTH STREET
                                                                                                                                                                                                 APPLICATION NUMBER: US 0 FILING DATE: 30-AUG-1991 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 0
FILING DATE: 30-AUG-1991
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                  TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000
   OLECULE TYPE:
                                                                                                                                                 NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
                                                                                                                                                                                                                                                                                                                                      FILING DATE:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: MA
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                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/07/938,336
        YPE: amino acids
OPOTIOGY: 1
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SMART, JOHN E
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COHEN, CHARLES M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/480,5
FILING DATE: 07-UN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESG., GILLIAN M.
REGISTRATION UMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-06
TREFERENCE/DOCKET NUMBER: CRP-06
TREFERENCE/DOCKET NUMBER: CRP-06
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                                                                       GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PALENTIN Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
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                                                                                       No.
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                                                                                                                                                                                                                                                                                                                                                                            amino acid
                                                                                                        Application US/08459129
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45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                              431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                              (617)
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OPPERMANN, HE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RUEGER, DAVID C.
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DAVID C.
MANUFACTURE OF AUTOGENOUS REPLACEMENT
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Pred. No. 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 431;
                                                                                                                                                                                                                                                                                             Length 431;
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Gaps

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US-09-219-391-4
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                                                                                                                                                                                                                                                                                                                                                          Sequence 4, Application US/09219391
patent No. 6133583
GENERAL INFORMATION:
APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 617/246-...
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
SECURITY: 431 amino acids
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/219,391
                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                   APPLICANT: COHEN, CHARLES M.
TITLE OF INVENTION: OP3-INDUCED MORPHOGENESIS
NUMBER OF SEQUENCES: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: KELLEY, ROBIN D.
REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CR.
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRINT APPLICATION DATA:
APPLICATION NUMBER: US/08/459,129
                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 424
PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 55 COUNTY: BOSTON
                                                                                                                                                                STREET: 45 SOUTH CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
les 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
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                                                                                                                       01748
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53 STATE STREET
                                                                                                                                       USA
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RUEGER, DAVID C.
PANG, ROY H.L.
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OZKAYNAK, ENGIN
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100.0%; Pre
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Pred. No. 2.3e-07;
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RESULT 153
US-08-469-411-6
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MEDIUM TYPE: Tape
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/06/469,411
FILLING DATE: 06-Unin-1995
CLASSIFICATION: -Unknown>
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 32,245
REFERENCE/DOCKET NUMBER: GI-5192B-CON
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-496-862
TELEPAX: 617-876-5951
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE: CHARACTERISTICS:
LENGTH: 431 Amino acids
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Best Local S
Matches 20
Query Match
Best Local Similarity 100.
Conservative
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Patent No. 6190880
GENERAL INFORMATION:
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PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/901,200
FILING DATE: 28-JUL-1997
ATTORNEY/AGENT INFORMATION:
NAME: MEYERS, THOMAS C.
REGISTRATION NUMBER: 36,989
REFERENCE/DOCKET NUMBER: CRP-076DV2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: (508) 435-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Match 100.0%; Score 111; DB 3; Local Similarity 100.0%; Pred. No. 2.3e-07; Local Similarity 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 431 amino acids TYPE: amino acid TOPOLOGY: linear
                                                                                                                                        LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Israel, David
RPPLICANT: Israel, Neil M.
TITLE OF INVENTION: Recombinant Bone Morphogenetic Protein
TITLE OF INVENTION Heterodimers, Compositions and Methods of Use.
                                                                                                                     SEQUENCE DESCRIPTION: SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Cambridge
                                    100.0%; Score 111; DB 3; Length 431; 100.0%; Pred. No. 2.3e-07;
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                     Mismatches
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US-09-019-339B-2
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US-09-170-936-17
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Patent No. 628
                                                                                                                                                                                                         Sequence 17,
                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                           Patent No.
                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (212)596-9090
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: RUEGER, N
APPLICANT: TUCKER, N
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: 13
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NAME: James F. Haley, Jr., Esq.
REGISTRATION NUMBER: 27,794
REFERENCE/DOCKET NUMBER: CRP-147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)
CURRENT APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: (212)596-9000
                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: 1251 A. CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/09/019,339B
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                                                                                                                                                                                                                                                                                                                                                                               Local
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                                                                                                                                                                                                                                                                                              386
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20; Conserv
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                                                                                                                                                                                                         Application US/09170936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E: James F. Haley, Jr., Esq. c/o FISH & NEAVE 1251 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               United States of America
PANG, ROY H.L.
SMART, JOHN E.
SMART, JOHN E.
TREATMENT TO PREVENT LOSS OF AND/OR
                                                                                    OPPERMANN, HERMAN
OZKAYNAK, ENGIN
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 111; DB 3; ilarity 100.0%; Pred. No. 2.3e-07; Conservative 0; Mismatches 0;
                                                                                                                                        KUBERASAMPATH, THANGAVEL COHEN, CHARLES M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MATFIX-FREE OSTEOGENIC DEVICES, IMPLANTS AND METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      David C
                                                                                                                          HERMANN
                                                                                                                                                                                                                                                                                                                                                                                               Length 431;
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US-09-170-936-17
                                                      Query Match
Best Local Similarity
Matches 20; Conserv
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FILING DATE:
CLASSIFICATION: 514
CRISTICATION DATA:
APPLICATION NUMBER: US 08/432,883
FILING DATE: 2-MAY-1995
ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESG., GILLIAN M.
                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: INCREA
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINI.
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                            REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CR.
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
TELEPAX: (617) 248-7100
                                                                                                                                              MOLECULE TYPE: protein
                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 45 SOUTH CITY: HOPKINTON
                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: U:
ZIP: 01748
                                                                                                                                                                                             ENGTH:
386 INPETVPKPCCAPTQLNAIS
                             1 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                             amino acid
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                                                                                                                                                                                               431 amino acids
                                                                Conservative
                                                                                                                                                               linear
                                                                              100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INCREASE BONE MASS IN METABOLIC BONE DISEASES
                                                                                                                                                                                                                                  17:
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                                                                                Score 111;
Pred. No. :
                               20
 405
                                                                  Mismatches
                                                                                  2.3e-07;
                                                                                                  DB 3;
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                                                                                                Length 431;
                                                                  Indels
                                                                    0;
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RESULT 156 Sequence 2, Application US/08402542 Patent No. 6395883 -08-402-542-2 GENERAL INFORMATION: APPLICANT: APPLICANT: APPLICANT: COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA: NUMBER OF SEQUENCES: 2 APPLICANT: KUBERASAMPATH, THANGAVEL
TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
TITLE OF INVENTION: OF MATTER
NUMBER OF SEQUENCES: 23 APPLICANT: COUNTRY: US ZIP: 01748 STREET: CITY: HOPKINTON ADDRESSEE: ADDRESSEE: PATENT ADMINISTRATOR/CREATIVE BIOMOLECULES ¥ 3: INC. 35 SOUTH STREET RUEGER, DAVID C OPPERMANN, HERMA OZKAYNAK, ENGIN USA R, WILLIAM K HERMANN Version #1.25

APPLICATION NUMBER:

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FILING DATE: 31-JUL-1992
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR.
INFORMATION FOR SEO ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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APPLICANT:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/938,336
                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
                                                                                                                                                                                                NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
STREET: 45 SOUTH STREET
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PRIOR APPLICATION DATA:
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FILING DATE: 04-MAR-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/971,091
FILING DATE: 03-NOV-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                  APPLICANT: SMART, JOHN E.
TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING
TITLE OF INVENTION: PROLIFERATION OF EPITHELIAL CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein
APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/946,235
FILING DATE: 16-SEP-1992
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                                                                                                                                                   USA
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CHARETTE, MARC F.
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                   PANG, ROY H.L.
                                                                                                                                                                                                                                                                                                                     OZKAYNAK,
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            US/08/461,113
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Pred. No. 2.3e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-828-281B-5
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US-08-828-281B-5
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Query Match
Best Local Similarity
Matches 20; Conserv
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Best Local Similarity
Matches 20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                          TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                               NAME: FENTON, GILLIAN M
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
                                                                                                                                                                                                                                                                                                FILING DATE:
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/828,281B
                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION:
TITLE OF INVENTION:
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NAME: FENTON ESG., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-1
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY:
STATE:
                                                                                                                                                                                                             TELEPHONE:
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ZIP: 01748
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TOPOLOGY: linear
                                                                                                                                      LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HOPKINTON
                                                                                                                    : 431 amino acids
amino acid
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45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 111; DB 3; illarity 100.0%; Pred. No. 2.3e-07; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHARETTE, Marc F.
FINKLESTEIN, Seth P.
ENTION: METHODS FOR ENHANCING FUNCTIONAL
JENTION: RECOVERY FOLLOWING CENTRAL NERVOUS SYSTEM ISCHEMIA OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (508)
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100.0%; Score 111; DB 4;
100.0%; Pred. No. 2.3e-07;
cive 0; Mismatches 0;
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                                 Length 431;
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 Gaps
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386

INPETVEKECCAPTQLNAIS 405

INPETVEKECCAPTOLNAIS 20

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TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO:
US-09-887-901-2
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US-09-887-901-2
                                                                                                                                                                                                           RESULT 160
US-08-456-033-17
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                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                           Sequence 17,
Patent No. 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (212)596-9090
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                        tent No.
                                                                    APPLICANT:
                                                                                                                                        APPLICANT:
                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 09/019,339
FILING DATE: «Unknown»
ATTORNEY/AGENT INFORMATION:
NAME: James F. Haley, Jr., Esq.
REGISTRATION NUMBER: 27,794
REFERENCE/DOCKET NUMBER: CRP-147
TELEPHONE: (212)596-9000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 10020
COMPUTER READABLE FORM:
MUEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/09/887,901
FILING DATE: 22-Jun-2001
CLASSIFICATION: «Unknown»
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: RUBGER, David C
TUCKER, Marjorie M
TITLE OF INVENTION: MATTRIX-FREE OSTEOGENIC DEVICES, IMPLANTS AND
METHODS OF USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
LE OF INVENTION:
LE OF INVENTION:
                                                                                                                                                                                                                                                                               386
                                                                                                                                                       INFORMATION:
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                                                                                                                                                                           7, Application US/08456033 6495513
                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: James F. Haley, Jr., Esq. STREET: 1251 Avenue of the Americas CITY: New York
                                                                                                                                                                                                                                                                               INPETVEKECCAPTOLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: United States of America
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 431 amino acids
TYPE: amino acid
                                                                                                                  MAIION.
RUEGER, DAVID C.
THANGAVEL
                                                                                                 OPPERMANN, HERMANN
                                                                  OZKAYNAK, ENGIN
PANG, ROY H.L.
                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                     CHARLES M
                                                                                                                                                                                                                                                                                                                                                                100.0%;
                MORPHOGEN-INDUCED NERVE REGENERATION AND REPAIR.
                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                    Score 111; DB 4;
Pred. No. 2.3e-07;
                                                                                                                                                                                                                                                                                                                                                     Mismatches
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                                                              Matches
                                                                                 Best
                                                                                             Query Match
                                                                                                                                                                                         TELEPHONE: (508) 435-9001
TELEPAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION UNMERE: US/08/456,033
FILING DATE: 31-MAY-1995
CLASSIFICATION: 514
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                    NAME: FENTON ESQ., GILLIAN M.
REGISTATION NUMBER: 36,508
REGISTRATION NUMBER: CRP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 45 SOUTH
                                                                                                                                                                           LENGTH: 431 amino acids
TYPE: amino acid
                                                              Local Similarity
nes 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
                                                                                                                                                                TOPOLOGY:
386 INDETVPKPCCAPTQLNAIS 405
                             1 INPETVPKPCCAPTOLNAIS 20
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                                                              Conservative
                                                                                                                                                                linear
                                                                               100.0%;
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                                                                 0
                                                                               Score 111; DB 4;
Pred. No. 2.3e-07
                                                                   Mismatches
                                                                                                Length 431;
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                                                                     Gaps
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US-08-643-321-16 Sequence 16, Apr -- No. 6498142 GENERAL INFORMATION: APPLICANT: COHEN, CHARLES M.
TITLE OF INVENTION: MORPHOGEN TREATMENT FOR CHRONIC TITLE OF INVENTION: REMAL FAILURE NUMBER OF SEQUENCES: 31 CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HU ADUAL: STREET: BOSTON MA COUNTRY: Application US/08643321 125 HIGH STREET USA SAMPATH, KUBER T. COHEN, CHARLES M. HURWITZ & THIBEAULT, LLP

US/08/643,321

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FOC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:

02110

APPLICATION NUMBER: US/08/643,321
FILING DATE:
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: TWOMEY, MICHAEL J
REGISTRATION NUMBER: 38,349
REFERENCE/DOCKET NUMBER: CRP-118
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000

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RESULT 163
US-09-148-925C-2
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                                                                                                                   Matches
                                                                                                                                   Query Match
Best Local
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Best Local
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                                                                                                                                                                                                                                            TELEFAX: (617) 248-710
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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Patent No. 6506729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS LENGTH: 431 amino acid
                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7013
TELEPAX: (617) 248-7100
                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: MEYERS, THOMAS C.
REGISTRATION NUMBER: 36,989
                                                                                                                                                                                        MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION:
                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/938,622 FILING DATE:
                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                    LENGTH:
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                                                         386 INPETVPKPCCAPTQLNAIS 405
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                                                                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PANG, ROY H.L.
PANG, ROY H.L.
COHEN, CHARLES M.
VENTION: METHODS AND COMPOSITIONS FOR THE
VENTION: TREATMENT AND PREVENTION OF PARKINSON'S DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          431 amino acids
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                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DAVID C.
                                                                                                                              100.0%; Score 111; DB 4; 100.0%; Pred. No. 2.3e-07;
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Pred. No. 2.3e-07;
Mismatches 0;
                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                             Version
                                                                                                                                                                                                                                                                                                                                                                                                                                              #1.30
                                                                                                                                            Length 431;
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                                                                                                                0;
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                                                                                                                Gaps
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Sequence 2, Application US/09148925C Patent No. 6551995
GENERAL INFORMATION:
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APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
APPLICATION NUMBER: US 08/147,023
FILING DATE: 1-NOV-1993
APPLICATION NUMBER: US 07/841,646
APPLICATION NUMBER: US 07/422,623 FILING DATE: 17-OCT-1989 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, V.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/148,925C
FILING DATE: 04-Sep-1998
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS: ADDRESSEE: TESTA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 07/579,865
FILING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
                                                                    APPLICATION NUMBER: US 0 FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/483,913
FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 07/179,406
FILING DATE: 08-APR-1988
                                                                                                                                      FILING DATE: 22-FEB-199
APPLICATION NUMBER: US
                                                                                                                                                          APPLICATION NUMBER: US 0 FILING DATE: 22-FEB-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 07/810,560 FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: MASSACHUSETTS
                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 07/569,920 FILING DATE: 20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: U.S.A.
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                                                                                                                                                                                                           FILING DATE: 23-FEB-1989
                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              PILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/599,543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 07/600,024
                                                                                                                                                                                                                                                                             PPLICATION NUMBER: US 07/232,630
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 07/616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                             ING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KUBERASAMPATH, TI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OZKAYNAK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   125 HIGH STREET
                                                                                                                17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                              21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENGIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             THANGAVEL
                                                                                          07/422,613
                                                                                                                                      07/422,699
                                                                                                                                                                                   07/660,162
                                                                                                                                                                                                                               07/315,342
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REFERENCE/DOCKET NUMBER: STK-001CP6C3

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OTHER INFORMATION: /Product="OP1-PP";
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-148-925C-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-957-425-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/08957425
Patent No. 6586388
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
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SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acids
TYPE: amino acid
TOPOLCOY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEFAX: 617/248-7100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS: ADDRESS: TESTA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: OPPERMANN, HERMI
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
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                                                                                                                                                                                                                                                                              COR APPLICATION DATA:
APPLICATION NUMBER: US/08/447,570
FILING DATE: 21-FBB-1992
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 660,162
FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 660,162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 53 STATE STREET CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/957,425 FILING DATE: 24-Oct-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STATE: MASSACHUSETTS COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                         APPLICATION NUMBER: US 600,024
FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 599,543
FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                           APPLICATION NUMBER: US 621,988
                                     APPLICATION NUMBER: US 579,865
                                                                                                                                            FILING DATE: 21-NOV-1990
                                                                                                                                                                                                   APPLICATION NUMBER: US 621,849
                                                                                                                                                              PPLICATION NUMBER: US 616,374
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                                                                                                                                                                                  LING DATE: 04-DEC-1990
                                                                                                                                                                                                                                                                   LING DATE: 22-FEB-1991
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RUEGER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 111; DB 4; 100.0%; Pred. No. 2.3e-07; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 431;
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US-09-780-601A-6
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Best Local
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Patent No. 6593109
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                                                         CLASSIFICATION:

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/469
APPLICATION NUMBER: US/08/469
FILING DATE: 06-Jun-1995
ATTORNEY/AGENT INFORMATION:
NAME: Kapinos, Ellen J.
REGISTRATION NUMBER: 32,245
REFERENCE/DOCKET NUMBER: GI-5
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-498-8622
TELEFAX: 617-876-5851
INFORMATION FOR SEQ ID NO: (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                     ZIP: 02140-2387

COMPUTER READABLE FORM:

MEDIUM TYPE: Tape

COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/780,601A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 87 Camb
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                                                                                                                                                                                                                                                        FILING DATE:
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FILING DATE: 20-AUG-1990
APPLICATION NUMBER: US 483,913
FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 422,613
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 237,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
APPLICATION NUMBER: US 179,460
                                                                                                                                                                                                                                                                                                                                         NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR.
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7100
TELEPAX: 617/248-7100
                                                                                                                                        TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                            LENGTH: 431 amino acids
TYPE: amino acid
100.0%; Score 111; DB 4; ilarity 100.0%; Pred. No. 2.3e-07; Conservative 0; Mismatches 0;
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                                                            Length 431;
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Legal Affairs, Genetics Institute, Inc
STREET: 87 CambridgePark Drive APPLICANT: Israel, David
APPLICANT: Wolfman, Neil M.
TITLE OF INVENTION: Recombinant Bc
TITLE OF INVENTION: Heterodimers, Application US/09780601A Recombinant Bone Morphogenetic Protein Heterodimers, Compositions and Methods of Use.

US/08/469,411

GI-5192B-CON

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RESULT 167
US-09-374-958C-39
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INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
TYPE: amino acid
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US-08-448-371A-10
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Sequence 39, Application US/09374958C Patent No. 6677432 GENERAL INFORMATION:
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Matches
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                                                                                                                                                                                                                  Query Match
Best Local
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GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                        NAME: MEYERS, Thomas C.

REGISTRATION NUMBER: 36,989
REFERENCE/DOCKET NUMBER: CRI
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
CCMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/448,371A
                                                                                                                                                                                                                                                                                   MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: TEN DIJKE, Peter
APPLICANT: HELDIN, Carl-Henrik
APPLICANT: MIYAZONO, Kohei
APPLICANT: SAWPATH, Kuber T.
TITLE OF INVENTION: Morphogenic Protein-Specific Cell
TITLE OF INVENTION: Surface Receptors and Uses Therefor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . Match 100.0%; Score 111; DB 4; Length 431; Local Similarity 100.0%; Pred. No. 2.3e-07; Indels 1es 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                  Local Similarity
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                                                                                                                         386 INPETVPKPCCAPTQLNAIS 405
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125 High St.
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                                                                                                                                                                                               Conservative
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-- NO: 10:
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                                                                                                                                                                                                              Score 111; DB 4;
Pred. No. 2.3e-07;
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                                                                                                                                                                                                                               Length 431;
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RESULT 169
US-08-937-755-2
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-672-224A-2
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US-09-672-224A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; FEATURE:
; OTHER INFORMATION: Morphogenic protein
US-09-374-958C-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: STK-4
CURRENT APPLICATION NUMBER: US/09/672,224A
CURRENT FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: 60/156,261
PRIOR FILING DATE: 1999-09-27
NUMBER OF SEQ ID NOS: 14
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2
                                                                                                                                                                                                                        Sequence 2, Application US/08937755
Patent No. 6723698
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Stryker Corporation
TITLE OF INVENTION: Modified Proteins and DNAs of the TGF-beta Superfamily, Including
TITLE OF INVENTION: Modified Morphogenic Proteins
FILE REFERENCE: STK-076
CURRENT APPLICATION NUMBER: US/09/374,958C
CURRENT FILING DATE: 1999-08-16
NUMBER OF SEQ ID NOS: 90
SOFTWARE: Patentin version 2.0
SEQ ID NO 39
                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: LEE, JOHN C.
APPLICANT: YEH, LEE-CHUAN C.
TITLE OF INVENTION: COMPOSITIONS AND THERAPEUTIC METHODS USING MORPHOGENIC TITLE OF INVENTION: PROTEINS, HORMONES AND HORMONE RECEPTORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 431
TYPE: PRT
ORGANISM: Homo sapiens
                                                  APPLICANT: COHEN, CHARLES M.

TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR THE
TITLE OF INVENTION: TREATMENT OF MOTOR NEURON INJURY AND NEUROPATHY
NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:
                                                                                                                                                                                      APPLICANT:
                                                                                                                                                  APPLICANT:
                                                                                                                                                                      APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
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1 Similarity 100.0%;
20; Conservative
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Similarity 100.0%; s
20; Conservative 0;
125 HIGH STREET
                                                                                                                                                                RUEGER, DAVID C.
SAMPATH, KUBER T.
OPPERMANN, HERMANN
                                                                                                                                                  PANG, ROY H.L.
                  PATENT ADMINISTRATOR, THIBEAULT, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 111; DB 4;
Pred. No. 2.3e-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 111; DB 4;
Pred. No. 2.3e-07;
                                                                                                                                                                                                                                                                                                                                                            405
                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                    TESTA, HURWITZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 431;
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ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0

CITY: BC STATE: M COUNTRY:

BOSTON : MA RY: USA

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Query Match 100.0%; Score 111; DB 4; Best Local Similarity 100.0%; Pred. No. 2.3e-07; Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/937,755
                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US90/07654
FILLING DATE: 1990128
CLASSIFICATION: 156
CLASSIFICATION: 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: OZKAYNAK, ENGIN
APPLICANT: OPPERMANN, HERMANN
APPLICANT: KUBERASAMPATH, THANGAVEL
APPLICANT: RUBEER, DAVID C
TITLE OF INVENTION: OSTECGENIC DEVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                      HURWITZ & THIBEAULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CRP-155
                                                                                                            CRP-001P5
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PCT-US91-07635-2
                                                                                             RESULT 172
PCT-US92-01968-17
; Sequence 17, Applicati
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                 ; TOPOLOGY: linear
; MOLECULE TYPE: protein
PCT-US91-07635-2
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Best Local Similarity 100
Matches 20; Conservative
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                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: OZKAYNAK, ENGIN
APPLICANT: RUEGER, DAVID C
APPLICANT: KUBERASAMPATH, THANGAVEL
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: protein
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MEDIUM TYPE: Floppy disk
COMPUTER: IEM FC compatible
COMPUTER: IEM FC COMPATIBLE
COMPUTER: PALENTIN POLYMON #1.25
SOFTWARE: PALENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRI
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS
                                                                           APPLICANT:
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CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: PILING DATE: 19911018
CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                          ENGTH:
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                                                                                                                                                                                                              386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                       20;
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USA
                                                                                                                                                                                                                                                                                                                                                                                                                      AMINO ACID
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3Y: linear
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                                                                                                                                                                                                                                                  INPETVPKPCCAPTQLNAIS 20
                                                                                                              Application PC/TUS9201968
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                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   617/248-7100
KUBERASAMPATH, THANGAVEL
PANG, ROY HL
OPPERMANN, HERMANN
RUEGER, DAVID C
                                                                               COHEN, CHARLES M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 111; DB 5;
100.0%; Pred. No. 2.3e-07
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                                                                                                                                                                                                                                                                                                         100.0%; Score 111; DB 5; 100.0%; Pred. No. 2.3e-07;
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; MOLECULE TYPE: protein US-08-937-755-2

TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:

REGISTRATION NUMBER: 36,989
REFERENCE/DOCKET NUMBER: CRITELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7013

CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: MEYERS, THOMAS C.

TYPE: amino acids
TYPE: amino acid
TOPOLOGY: line-

Sequence 4, Applicati GENERAL INFORMATION:

Application PC/TUS9007654

386 INPETVPKPCCAPTQLNAIS 405

INPETVPKPCCAPTQLNAIS 20

CORRESPONDENCE ADDRESS: ADDRESSEE: TESTA, HU

ADDRESSEE:

STREET: 53 S' CITY: BOSTON

53 STATE STREET

Ā

COUNTRY: US ZIP: 02109

USA

Gaps

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ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRPTELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000

TELEFAX: 627/248-7100
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 667,274
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 752,764
FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                          -US93-05446-2
                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: ISM PC COMPATIBLE
COMPUTER: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/05446
ETITING AFFE. 1920.06.06
ATTORNEY/AGENT INFORMATION: NAME: PITCHER ESQ, EDMU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: TITLE OF INVENTION: NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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UMBER OF SEQUENCES:
                                      CLASSIFICATION:
                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                          CITY: Hopkinton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: PFILING DATE: 19920311
CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                           ADDRESSEE:
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                                                                                                                                                                                                     01748
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20; Conservative
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                                                                                                                                                                                                                                                                           35 South Street
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                                                      19930608
ESQ, EDMUND R
                                                                                                                                                                                                                                                                                                                                PROSTHETIC DEVICES HAVING ENHANCED OSTEOGENIC PROPERTIES
22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 111; DB 5; 100.0%; Pred. No. 2.3e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROTEIN-INDUCED MORPHOGENESIS
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                                                             Matches
                                                                                           Query Match
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                                                                                                                                                                                                                      NAME: KELLEY, ROBIN D.
REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CR
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: ST
TELECOMMUNICATION INFORMATION:
TELEPHONE: 611/248-7000
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
                                                                                                                                         MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                     FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/07189
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 19930 CLASSIFICATION:
                                                                                                                                                            TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: U
ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: HOPKINTON
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                                                                              Local
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TYPE: AMINO ACID
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER:
386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          386 INPETVPKPCCAPTQLNAIS 405
                            1 INPETVPKPCCAPTQLNAIS 20
                                                             l Similarity
20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B: INC.
35 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  USA
                                                              Conservative
                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PATENT ADMINISTRATOR/CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                                                                                                                     19930729
                                                                            100.0%;
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                                                                          Score 111; DB 5;
Pred. No. 2.3e-07;
                                                             Mismatches
                                                                                        Length 431;
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                                                             Indels
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; Sequence 17, Application PC/TUS9307190

RESULT 175 PCT-US93-07190-17

Length 431;

Indels

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PCT-US93-07231-17
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Best Local (
 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/07231
FILING DATE: 1930729
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: KELLEY, ROBIN D.
RECISTRATION NUMBER: GRP-070
TELECOMOTUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELECOMOTUNICATION INFORMATION:
TELEPHONE: 617/248-7000
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MEDIUM TYPE: Floppy disk

COMPUTER: IEM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PATENTIA Release #1.0, Vers

SOFTWARE: PATENTIAN APPLICATION DATA:

APPLICATION NUMBER: PCT/US93/07190

ATTORNEY/AGENT INFORMATION:

NAME: KELLEY, ROBIN D.

REGISTRATION NUMBER: 34,637

REGISTRATION NUMBER: 34,637
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INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: CR
                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                               CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               386 INPETVPKPCCAPTQLNAIS 405
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   amino acid
   GY: linear
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                                                                         PCT-US93-08808-17
                                                                                       RESULT 178
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Best Local :
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                                     Sequence 17, Applicat GENERAL INFORMATION:
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                                                                                                                                                                                                                                            Best Local
                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                     TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER: 34,63/
REGISTRATION NUMBER: CRP-
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: KELLEY ESQ, ROBIN D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
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                                                                                                                                                    386 INPETVPKPCCAPTQLNAIS
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   amino acid
   GY: linear
                                                                                                                                                                                    INPETVEKECCAPTOLNAIS 20
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45 SOUTH STREET
                                                         Application
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                                                                                                                                                                                                                          100.0%; Score 111; DB 5; ilarity 100.0%; Pred. No. 2.3e-07; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 111; DB 5; 100.0%; Pred. No. 2.3e-07;
   MORPHOGEN-INDUCED LIVER REGENERATION
                                                         PC/TUS9308808
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Length 431;

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PCT-US93-08885-17
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; MOLECULE TYPE: protein
PCT-US93-08808-17
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17, Application PC/TUS9308885 GENERAL INFORMATION:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO:
              ATTORNEY/AGENT INFORMATION:
                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                    SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE BIOMOLECULES, INC.
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: KELLEY ESO, ROBIN D.
REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CRP-072
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: PRIOR APPLICATION NUMBER:
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ATTORNEY/AGENT INFORMATION:
NAME: KELLEY ESQ, ROBIN
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APPLICATION NUMBER: PC
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CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE BIOMOLECULES, INC.
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                            STREET: 45
                                                                                     FILING DATE:
CLASSIFICATION
                                                                                                                      APPLICATION NUMBER:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
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KELLEY ESQ, ROBIN D
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                                                                                     CATION:
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617/248-7100
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                                                                                                                  PCT/US93/08885
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Matches
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                                                                                                                                                                                                                APPLICATION NUMBER: US 07/753,059
FILING DATE: 30-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/752,857
FILING DATE: 30-AUG-1991
PRIOR APPLICATION NUMBER: US 07/923,780
APPLICATION NUMBER: US 07/923,780
PRIOR APPLICATION NUMBER: 13-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/
PRIOR DATE: 11 "NAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/
PILING DATE: 30-AUG-1991
PRIOR APPLICATION DATA:
                       INFORMATION FOR SEQ ID NO:
                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/922,813
FILING DATE: 31-UUL-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
SEQUENCE CHARACTERISTICS:
                                      TELECOMMUNICATION INFORMATION: TELEPHONE: (508)435-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE BIOMOLECULES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CTELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein
                                                                              NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: PCT/US93/10520 FILING DATE: CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 45 SOUTH CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            / Match 100.0%; Score 111; DB 5; Local Similarity 100.0%; Pred. No. 2.3e-07; Des 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: US
ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 386 INPETVPKPCCAPTQLNAIS 405
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30-AUG-1991
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                     4.
                                                                                CRP-076PC
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RESULT 181
PCT-US95-05467-10
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Best Local
                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                 Sequence 2, Application PC/TUS9506724 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: protein -US95-05467-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear MOLECULE TYPE: protein
                  TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/05467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR,
ADDRESSEE: THIBEAULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION:
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STATE: MA
STATE: WA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH:
 ADDRESSEE:
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                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                    linear
PATENT ADMINISTRATOR, TESTA, HURWITZ &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 111; DB 5; 100.0%; Pred. No. 2.3e-07;
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SURFACE RECEPTORS AND USES THEREFOR
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                                                 MANUFACTURE OF AUTOGENOUS REPLACEMENT BODY PARTS
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Pred. No. 2.3e-07;
                                                                                                                                                                                                                                                                                 Mismatches
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                                                                                                                                                                                                                                                                                                                    DB 5;
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US-08-411-607A-3
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Patent No. 5994102
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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Best Local
                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ILM PC compactible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/411,607A
FILING DATE: 11-APR-1995
CLASSIFFCATION: 435
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC-Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: I
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                       APPLICANT: ROSEN, CRAIG A:
APPLICANT: HE, WEI WU
TITLE OF INVENTION: PROSTATIC GROWTH FACTOR
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: THIBEAULT
STREET: 53 STATE STREET
CITY: BOSTON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: KELLEY, ROBIN D. REGISTRATION NUMBER: 34 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                      STREET: 6 BECKI
CITY: ROSELAND
STATE: NJ
                                                                                                                                                                                                                                                                                                                      ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI, ADDRESSEE: STEWART & OLSTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE:
                                                                                                                                                                                                                                    COUNTRY: U
            REFERENCE/DOCKET NUMBER: 325800-329
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                                                                                                                                                                                                                                                                                                           6 BECKER FARM ROAD
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                       NUMBER: 36,134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                               PETER L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 111; DB 5; 100.0%; Pred. No. 2.3e-07;
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US-09-361-741-3
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                                                                                           Matches
                                                                                                                  Query Match
Best Local Similarity
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Best Local Similarity 100.0%;
Matches 20; Conservative C
                                                                                                                                                                                                                                                                                                                             TELEPHONE: (201)994-1700
TELEFAX: (201)994-1744
INFORMATION FOR EGO ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: FERRARO, GREGORY D
REGISTRATION NUMBER: 36,134
REFERENCE DOCKET NUMBER: 325800-329
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/4:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: FEEDER OF CONCESSION.
                                                                                                                                                                                                                            MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: HUDSON, PETER L
APPLICANT: ROSEN, CRAIG A
APPLICANT: HE, WEI WU
TITLE OF INVENTION: PROSTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                 TYPE: amino acid
STRANDEDNESS: sir
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI, ADDRESSEE: STEWART & OLSTEIN
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  1 INPETVPKPCCAPTQLNAIS 20
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                                                                                           Conservative
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                                                                                                                                                                                                                                                       ss: single
linear
                                                                                                            100.0%; Score 111; DB 4; 100.0%; Pred. No. 2.3e-07;
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                                                                                        Mismatches
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                                                                                                                                       Length 432;
                                                                                        Indels
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                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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US-07-841-646-13
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US-09-461-418-3
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                                                                                                                                                                                                                                                 Sequence 13, Application US/07841646 Patent No. 5266683 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 111; DB 4;
Best Local Similarity 100.0%; Pred. No. 2.3e-07;
Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 3, Application US/09461418
Patent No. 6521227
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: (201) 994-1
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
                                                                                                                              APPLICANT: OPDERMANN, HERMAN
APPLICANT: OZKAYNAK, ENGIN
APPLICANT: KUBERASAMPATH, TH
APPLICANT: RUEGER, DAVID C.
                                                                                                      APPLICANT: RUEGER, DAVID APPLICANT: PANG, ROY H.L.
                                                                                     TITLE OF INVENTION:
                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy disk
COMPOTTER: IBM PC compatible
COMPOTTER: IBM PC compatible
COMPOTTER: IBM PC compatible
COMPOTTER: IBM PC compatible
COMPOTTER: PATENTIA PCLOS/MS-DOS
SOFTWARE: PATENTIA Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/09/461,418
FILING DATE: 16-Dec-1999
CLASSIFICATION NUMBER: US/09/461,418
FILING DATE: 16-Dec-1999
FRIOR APPLICATION NUMBER: US/08/411,607A
FILING DATE: 11-APR-1995
ATTORNEY/AGENT INFORMATION:
NAME: FERRARO, GREGORY D
REGISTRATION NUMBER: 35,134
REGISTRATION NUMBER: 35,134
REGISTRATION NUMBER: 35,134
REGISTRATION NUMBER: 35,134
REGISTRATION NUMBER: 37,134
REGISTRAT
     ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 07068
COMPUTER READABLE FORM:
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TITLE OF INVENTION: PROSTATIC GROWTH FACTOR
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: HUDSON, PETER L
ROSEN, CRAIG A
                                                                                                                                                                                                                                                                                                                                                                                                                                             387 INPETVPKPCCAPTQLNAIS 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               387 INPETVPKPCCAPTQLNAIS 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 432 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: ROSELAND
STATE: NJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 6 BECKER FARM ROAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: US
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STEWART & OLSTEIN
TESTA, HURWITZ & THIBEAULT
                                                                               OSTEOGENIC DEVICES
                                                                                                                                                                                                                      HERMANN
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                                                                                                                                                                 THANGAVEL
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Length 432; Indels

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STREET: 53 ST CITY: BOSTON STATE: MASSAC

MASSACHUSETTS

U.S.A.

02109

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TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 484 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/07/841,646
FILING DATE: 19920221
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 810,560
FILING DATE: 20_DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PILING DATE: 22-FEB-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 621,988
FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 621,849
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PRIOR APPLICATION DATA:

PRIOR APPLICATION NUMBER: US. 660,162
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 827,052
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 422,613
FILING DATE: 17-OCT-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 20-20-
PRIOR APPLICATION DATA:
PRIOR TAMENON NUMBER: US 483,913
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APPLICATION NUMBER: US 579,865
FILING DATE: 07-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 21-NOV-1990
PRIOR APPLICATION UMBER: US 600,024
PILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 04-DEC-1990
PRIOR APPLICATION NUMBER: US 616,374
                                                                                                                           TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                         FILING DATE: 15-AUG-
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
                                                                                                                                                                                                                                FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                    NAME: PITCHER, EDMUND R. REGISTRATION NUMBER: 27, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 2: FILING DATE: 15-AUG-1988
                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 1
FILING DATE: 08-APR-1988
LENGTH: 484 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   53 STATE STREET
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                                                                                                                                                                                                                                                                            US 179,460
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                                                                                                     APPLICATION UNBER: US 600,024
FILING DATE: 18-OCT-1990
PRIOR APPLICATION DATA:
APPLICATION UNWER: US 599,543
FILING DATE: 18-OCT-1990
PRIOR APPLICATION DATA:
APPLICATION UNWER: US 579,865
FILING DATE: 07-SEP-1990
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 621,988
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 2
CLASSIFICATION:
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                                                                                       APPLICATION NUMBER:
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Query Match
Best Local Similarity
Matches 20; Conserv Conservative 100.0%; Score 111; 1 100.0%; Pred. No. 2.0 Live 0; Mismatches 2.6e-07; DB 1; Length 484; Indels 0 Gaps

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Application US/08147023

CORRESPONDENCE ADDRESS TITLE OF INVENTION: OSTEOGENIC DEVICES TOMBER OF SEQUENCES: 33 E: TESTA, HURWITZ & THIBEAULT 53 STATE STREET OZKAYNAK, OPPERMANN, HERMANN ROY H.L THANGAVEL

SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/147,023 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
COMPUTER: PC-DOS/MS-DOS MASSACHUSETTS

APPLICATION NUMBER: US 8 FILING DATE: 20-DEC-1991 21-FEB-1992 US 810,560

FILING DATE: 22-FEB-1991 PRIOR APPLICATION DATA: UMBER: US 827,052 28-JAN-1992 US 660,162

FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 616,374
FILING DATE: 21-NOV-1990
PRIOR APPLICATION DATA:

FILING DATA:
PRIOR APPLICATION DATA:
US 483,913 CATION NUMBER: US 4 20-AUG-1990 US 569,920

US 422,613

TYPE:

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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -08-447-570-13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US
FILING DATE: 23-FEB-15
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 15-AUG-15
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 15-AUG-15
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660,162
FILING DATE: 22-FEB-1991
DBTOD NEDITATION NUMBER: 129-FEB-1991
                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/447,570
FILING DATE: 21-FB-1992
                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                     CLASSIFICATION: 536
PRIOR APPLICATION UNDER: US 810,560
PFILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 484 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-001CP6
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: OZKAYNAK, ENGIN
APPLICANT: KUBERASAMPATH, T
APPLICANT: RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: OPPERMANN, HERMANN
APPLICANT: OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
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STREET: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TLE OF INVENTION:
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5714589
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                                                                                                                                                                                                                                                                                                                                                                                          MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                              53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 111; DB 1; nilarity 100.0%; Pred. No. 2.6e-07; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                        U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TUMBER: US 232,630
15-AUG-1988
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OSTEOGENIC DEVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US 179,460
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RESULT 189
US-08-449-700-13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 483,913
FILING DATE: 22-FEB-1990
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 422,613
FILING DATE: 17-OCT-1989
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 315,342
FILING DATE: 32-FEB-1989
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 32,630
FILING DATE: 15-AUG-1988
PRIOR APPLICATION NUMBER: US 32,630
FILING DATE: 15-AUG-1988
PRIOR APPLICATION NUMBER: US 179,460
PRIOR APPLICATION NUMBER: US 179,460
PRIOR APPLICATION NUMBER: US 179,460
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 18-OCT-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 579,865
FILING DATE: _07-SEP-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 569,920
FILING DATE: _20-AUG-1990
                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSE: TESTA, HURWITZ & THIBEAULT
STREET: 53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: CRP-001CP6 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 18-OCT-1990
PRIOR APPLICATION UNMBER: US 599,543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amir
                                                                                                                                                                  PPLICANT: RUEGER, PPLICANT: PANG, RUEGER, RUEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 100. es 20; Conservative
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RUEGER, DAVID C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 111; DB 1;
100.0%; Pred. No. 2.6e-07;
ative 0; Mismatches 0;
                                                                                                                                                                           OSTEOGENIC DEVICES
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MOLECULE TYPE:
-08-449-700-13
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FILING DATE: 28-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 660,162
FILING DATE: 22-FEB-1991
FRIOR APPLICATION NUMBER: US 621,988
FILING DATE: 04-DEC-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 621,849
FILING DATE: 04-DEC-1990
FILING DATE: 04-DEC-1990
FILING DATE: 04-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 483,913
FILING DATE: 22-FEB-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 422,613
FILING DATE: 17-OCT-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
                                                                                TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 484 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OMPUTER READABLE FURN.
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
US/08/449,700
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PRIOR APPLICATION DATA:
US 810,560
                                                                                                                                                                                                             APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
ATTOSNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-0
                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
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PRIOR APPLICATION DATA:
UN 1913,913
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APPLICATION NUMBER: 1
FILING DATE: 18-OCT-
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 600,024
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APPLICATION NUMBER: US 616,374
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ZIP: 02109
                                           LENGTH: 484 amino acids
TYPE: amino acid
TOPOLOGY: linear
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MASSACHUSETTS
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18-OCT-1990
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RESULT 191 US-09-148-925C-13

Sequence 13, 65: 995
Patent No. 6551995
GENERAL INFORMATION:
GENERAL INFORMATION:
OZKAYNAK, ENGIN
OZKAYNAK, ENGIN
THA

THANGAVEL

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Patent No. 5
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/449,699A
FILING DATE: 24-MAY-1995
CLASSIFICATION: 424
PRIOR APPLICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/147,023
FILING DATE: 01-NOV-1993
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
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Best Local
                                                                   Matches
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Best Local Similarity
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                                                                                                                                                                                                         TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 484 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: STITLECOMMUNICATION INFORMATION:
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                                                                                                                                                                         LENGTH: 484 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: U.S.A.
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439 INPETVPKPCCAPTQLNAIS 458
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                      1 INPETVPKPCCAPTQLNAIS 20
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5958441
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OZENJAK, EAL
OZENASAMPATH, THA
KUBERASAMPATH, THA
TORR, DAVID C.
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125 HIGH STREET
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                                                                   100.0%; Score 111; DB 2; ilarity 100.0%; Pred. No. 2.6e-07; Conservative 0; Mismatches 0;
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Length 484; Indels

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Gaps

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INFORMATION FOR SEQ ID NO: 13:
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APPLICATION NUMBER: US OF FILING DATE: 17-OCT-1989
ATTORNEY/AGENT INFORMATION:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/148,925C
FILING DATE: 04-Sep-1998
                                                                                                                                                             REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: STK-001CP6C3
TELECOMMUNICATION: INFORMATION:
TELEPHONE: 617/248-7000
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MEDIUM TYPE: Floppy disk
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ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET
                                                                    SEQUENCE CHARACTERISTICS:
ыдмыги: 484 amino acids
TYPE: amino acid
                                                                                                                            TELEFAX: 617/248-7100
                                                                                                                                                                                                                                                                                      NAME: DIANA M. STEEL
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OF INVENTION: OST
R OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 07/422,613
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APPLICATION NUMBER: US 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 07/600,024 FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/569,920 FILING DATE: 20-AUG-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PPLICATION NUMBER: US 07/315,342
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LING DATE: 22-FEB-1991
OF OTHER PROPERTY OF THE PROPERTY
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NG DATE: 21-FEB-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATION NUMBER: US 07/616,374
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: 08-APR-1988
: 07/232,630
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ON: OSTEOGENIC DEVICES
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SEQUENCE DESCRIPȚION: SEQ ID NO: 13:
US-09-148-925C-13
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US-08-957-425-13
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Patent No. 6586388
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/447,570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 33 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: OPPERMANN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: OSTEOGENIC DEVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     439 INPETVPKPCCAPTQLNAIS 458
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                                                                                           FILING DATE: 22-FEB-
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 53 S
CITY: BOSTON
                                                                        FILING DATE:
                                                                                                                                                             APPLICATION NUMBER: US
                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                               APPLICATION NUMBER: US
                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 621,849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 660,162 FILING DATE: 22-FEB-1991 APPLICATION NUMBER: US 621,988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 616,374
                                                                                                                                                                                                                                                                                                                                                     PPLICATION NUMBER: US 599,543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DDRESSEE: TESTA, HURWI
TREET: 53 STATE STREET
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                                                                                                                                                                                                                                                                                                                                                                               PPLICATION NUMBER: US 600,024
ILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                       LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                             LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LING DATE: 28-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MASSACHUSETTS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ROY H.L.
                                                                        17-OCT-1989
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                                                                                                                                                                                                    20-AUG-1990
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                                                                                                  US 422,613
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                                                                                                                                                                483,913
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APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1986
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1986

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RESULT 193
US-08-278-729A-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                             MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC_DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/278,729A
FILING DATE: 20-UUL-1994
CLASSIFICATION: 435
ATTORNEY,AGENT INFORMATION:
NAME: PITCHER ESG., EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-058CPFW
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 6, App.
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                                                                                                 TELEFAX: (508) 435-6951 INFORMATION FOR SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: 13: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                              ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
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                           STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
                                               LENGTH: 139 amino acids
TYPE: amino acid
LECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
REGERENCE/DOCKET NUMBER: CRP-001CP6
REFERENCE/DOCKET NUMBER: CRP-001CP6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                  ELEPHONE:
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TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/08278729A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: 617/248-7100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                   USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OPPERMANN,
         single
linear
                                                                                                                                (508) 435-9001
protein
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CHARLES M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MHOP
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INPUTVPKPCCAPTQLNAIS 113

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NAME/KEY: Protein LOCATION: 1..139 OTHER INFORMATION: US-08-155-343A-6
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                     Query Match
Best Local Similarity
Matches 19; Consert
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Best Local Similarity
                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 435
ATTORINEY/AGENT INFORMATION:
NAME: FENTON ESG., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-06
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-155-343A-6
                                                                                                                                                                                                                                                                TELEFAX: (617) 248-710
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/155,343A
FILING DATE: 15-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 33

CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: COHEN, CHARLES M.
APPLICANT: PANG, ROY H.L.
TITLE OF INVENTION: MORPHOGENIC-INDUCED PERIODONTAL TISSUE
TITLE OF INVENTION: REGENERATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
                                                                                                                                                                                                               STRANDEDNESS:
                                                                                                                                                                                                                                TYPE: amino acid
                                                                                                                                                                                                    OPOLOGY:
                                                                                                                                                                                                                                            ENGTH:
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 1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                 (617) 248-7560
(617) 248-7100
                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPPERMANN, HERMAN COHEN, CHARLES M.
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                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E: Floppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                 protein
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                                                  97.3%;
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                                                                                                                   /note= "MOP-1 (MATURE FORM)"
                                                                                                                                                                                                                                                                                     6:
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Pred. No. 1.9e-07
                                                                                                                                                                                                                                                                                                                                                    CRP-067FW
                                   1; Mismatches
                                                  Score 108; DB 1;
Pred. No. 1.9e-07
                                                                    DB 1;
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                                    Gaps
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RESULT 196
US-08-643-563A-6
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                                                                   Sequence 6, Application US/08643563A Patent No. 5707810
                                                                                                                                                                                                                                                                       Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Flopy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/406,672
PILING DATE: 20-MAR-1995
CLASSIFICATION = 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                    Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 752,857
FILING DATE: 30-AUG-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 667,274
                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 11-MAR-1991
ATTORNEY/AGENT INFORMATION:
                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR DISEASES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY:
                                                                                                                                                                                                                                                                                                                                     LOCATION: 1..139
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 139 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: FENTON ESq., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-060CN
                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
INFORMATION:
CANT: SMART, JOHN
CANT: OPPERMANN, HERMAN
CANT: OZKAYNAK, ENGIN
                                                                                                                                                                              94 INPDTVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                            1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                   Similarity
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OZKAYNAK, ENGIN
RUEGER, DAVID C.
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                                                                                                                                                                                                                                                    Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                          protein
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                                                                                                                                                                                                                                                                 97.3%;
                                                                                                                                                                                                                                                                                                                                       /note= "MOP-1 (MATURE FORM)"
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                                                                                                                                                                                                                                                                 Score 108; DB 1;
Pred. No. 1.9e-07;
                                                                                                                                                                                                                                                  Mismatches
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RESULT 197
US-08-643-763A-6
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                                                                                                                                                                                                                                                                                                                      Sequence 6, Application US/08643763A Patent No. 5733878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 97.3%;
Best Local Similarity 95.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/643,563A FILING DATE: 06-MAY-1996 CLASSIFICATION: 435
                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
                                                                                                                                                                                                                                                                APPLICANT: KUBERASAMPATH, THANGAVEL APPLICANT: RUEGER, DAVID C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: TWOMEY ESG., MICHAEL J.
REGISTRATION NUMBER: 38, 349
REFERENCE/DOCKET NUMBER: CRP-058CN2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: MORPHOGENIC PROTEIN SCREENING METHOD NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (508) 435-9001
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                                                                         CITY: HOPKINTON STATE: MA
                                                     COUNTRY:
                                                                                                          STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: Protein LOCATION: 1.139 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: U
ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COPOLOGY:
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                                                                                                                                                                                                                                                                                                   INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19;
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USA
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                                                                                                            45 SOUTH STREET
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                                                                                                                                                           MORPHOGENIC-INDUCED PERIODONTAL TISSUE REGENERATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "MOP-1 (MATURE FORM)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 108;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
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US-08-462-623-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESG., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-06
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                quence 6, Appl
tent No. 57391
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 08/445,882
FILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESG., GILLIAN M.
                                                                                                                                                     COMPUTER READABLE FORM:
MBDIUM TYPE: Floppy disk
COMPUTER: IBM FORMATIBLE
COMPUTER: IBM FORMAS-DOS
OFRATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: OZKAÝNAK, ENGIN
APPLICANT: SMART, JOHN E.
TITLE OF INVENTION: WORPHOGEN TREATMENT OF GASTROINTESTINAL
TITLE OF INVENTION: ULCERS.
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 06-MAY CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: Protein
LOCATION: 1.139
OTHER INFORMATION: /note= "MOP-1 (MATURE FORM)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                          STREET: 45 SOUTH CITY: HOPKINTON
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                                                                                                                   APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                      COUNTRY:
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PANG, ROY H.L.
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COHEN, CHARLES M.
CHARETTE, MARC F.
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
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                                                                                                                                         US/08/462,623
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JS-08-451-953A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                 COUNTRY: USA
ZIP: 01748
ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/451,953A
FILING DATE: 26-MAY-1995.
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: Z7,829
REFERENCE/DOCKET NUMBER: CRP-058CN
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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Best Local Similarity
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TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
                               TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: (
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tent No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
STRANDEDNESS: sir
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ECULE TYPE: protein
STRANDEDNESS:
                                                                                                        ELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94 INPDIVEKECCAPTQUALS 113
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                     amino acids
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45 SOUTH STREET
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linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KUBERASAMPATH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OPPERMANN, HERMAN
OZKAYNAK, ENGIN
                                                                                                         (508) 435-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ROY H.L.
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95.0%;
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; Pred. No. 1.9e
1; Mismatches
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TOPOLOGY: li

ss: single linear

NAME/KEY: Protein

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Search completed: October 26, 2004, 07:51:28 Job time: 46 secs
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Patent No. 5849686
; GENERAL INFORMATION:
APPLICANT: KUBERASAMPATH, THANGAVEL
APPLICANT: RUBGER, DAVID C.
APPLICANT: RUBGER, DAVID C.
APPLICANT: PANG, ROY H.L.
APPLICANT: PANG, ROY H.L.
APPLICANT: COHEN, CHARLES M.
APPLICANT: COHEN, CHARLES M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δõ
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US-08-445-468A-6
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; OTHER INFORMATION: /note= "MOP-1 (MATURE FORM)"
US-08-451-953A-6
                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: FENTON Esq., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-072FW2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7560
TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
TYPE: Amino acids
                                                                                                                                                                                           Matches
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Best Local Similarity
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Best Local Similarity 95.0
Matches 19; Conservative
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: TRM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: BatentIn Release #1.0, Vers
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/445,468A
FILING DATE: 22-MAY-1995
CIASSIFERCATION: 514
                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: protein FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATE: COHEN, CHARLES M.

TITLE OF INVENTION: MORPHOGEN-INDUCED LIVER REGENERATION NUMBER OF SEQUENCES: 33

CORRESPONDENCE ADDRESS:

ADDRESSE: PATENT ADDRINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                       NAME/KEY: Protein LOCATION: 1.139 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: .U:
ZIP: 01748
                                                                                             94 INPDTVPKPCCAPTQLNAIS 113
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                                                                                                                                                                                      97.3%; Score 108; DB 2; Length 139; 95.0%; Pred. No. 1.9e-07; Indels
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  pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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DB seq length: 2000000000
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                                                                                                                                                                Score
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18: /cgn2 6/ptcdata/2/pubpaa/USGO_NEW PUB.pep:*

19: /cgn2 6/ptcdata/2/pubpaa/USGO_NEW PUB.pep:*
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1 INPETVPKPCCAPTQ
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Gapop 10.0 , Gapext 0.5
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Maximum Match 100%
Listing first 200
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(without alignments)
134.899 Million cell updates/sec
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Sequence 30, Appli
Sequence 30, Appli
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                                Sequence 11, Application US/10619910

Publication No. US20040053844A1

GENERAL INFORMATION:

APPLICANT: Kyocera Corporation

APPLICANT: Suzuki, Yoshihisa

APPLICANT: Suzuki, Yoshihisa

APPLICANT: Tanihara, Masao

TITLE OF INVENTION: A Peptide and Osteogenetic Accelerator

FILE REFERENCE: 81918-0001

CURRENT APPLICATION UNUMEER: US/10/619,910

CURRENT APPLICATION NUMBER: US/09/439,779B

PRIOR APPLICATION NUMBER: US/09/439,779B

PRIOR FILING DATE: 2001-09-10

NUMBER OF SEQ ID NOS: 11

SOFTWARE: Patentin version 3.1

SEQ ID NO 11

LENGTH: 20

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: :
   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
                                                                                                                                                                                                                                                                                                                                                                                      4 US-10-375-150-10
US-09-813-398-28
US-09-754-831A-15
US-09-754-831A-16
US-09-754-831A-14
US-10-115-405-12
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US-09-952-318A-25
US-00-952-318A-25
US-10-619-910-7
US-10-08-34-20
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US-09-930-112-833
US-09-930-113-83
US-09-952-118A-8
US-09-952-118A-8
US-09-952-318A-23
  Score 111; DB 15;
Pred. No. 7.8e-08;
                                                                                                                                                                                                                                                                                                                                                       ALIGNMENTS
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Sequence 28, Appl
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Sequence 14, Appl
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Sequence 44, Appl
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Sequence 14, Appl
Sequence 17, Appl
Sequence 17, Appl
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Sequence 27, Appl
Sequence 27, Appl
Sequence 301, Appl
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Sequence 301, Appl
Sequence 31, Appl
Sequence 301, Appl
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Matches

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RESULT 2
US-09-754-831A-39
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SEQ ID NO 39
LENGTH: 97
TYPE: PRT
CRGANISM: mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 07/232,630
PRIOR FILING DATE: 1988-08-15
PRIOR APPLICATION NUMBER: US 07/179,406
PRIOR FILING DATE: 1988-04-08
NUMBER OF SEQ ID NOS: 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: STX-008CN
CURRENT APPLICATION NUMBER: US/09/754,831A
CURRENT FILING DATE: 2001-01-03
PRIOR APPLICATION NUMBER: US 08/375,901
PRIOR FILING DATE: 1995-01-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 08/145,812
PRIOR FILING DATE: 1993-11-01
PRIOR APPLICATION NUMBER: US 07/995,345
PRIOR FILING DATE: 1992-12-22
PRIOR APPLICATION NUMBER: US 07/315,342
PRIOR FILING DATE: 1989-02-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Oppermann, Herman
APPLICANT: Kuberasampath, T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Osteogenic Devices
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE: OTHER INFORMATION: OP1 shorter sequence capable of inducing endochondral bone format
COMPUTER READABLE FORM:
                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES
                                                                                                                                                                                               TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR PRODUCING MORPHOGEN ANALOGS
                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   52 INPETVPKPCCAPTQLNAIS 71
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                   COUNTRY: USA
ZIP: 01748
                                                            STATE: MA
                                                                           STREET: 45 SOUTH STREET CITY: HOPKINTON
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Rueger, David
Ozkaynak, Engin
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                                                                                                                                                                                                                                                        GRIFFITH, DIANA L
CARLSON, WILLIAM D
RUEGER, DAVID C
                                                                                                                                                                                                                                           SAMPATH, KUBER T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 111; DB 10; 100.0%; Pred. No. 3.5e-07;
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OTHER INFORMATION: /product= "hop-1"

SEQUENCE DESCRIPTION: SEQ ID NO: 1:

US-09-791-946-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-187-394-16
                                                                                                 CURRENT APPLICATION NUMBER: US/10/187.394

CTLESTON NUMBER: US/10/187.394

CLESTON NUMBER: US/10/187.394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 16, Application US/10187394 Publication No. US20030176667A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 100.0%; Score 111; I
Best Local Similarity 100.0%; Fred. No. 3.7
Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                           APPLICANT: KECK, PETER
APPLICANT: SMART, JOHN
TITLE OF INVENTION: SINGLE CHAIN ANALOGS OF TGF-B
TITLE OF INVENTION: SUPERFAMILY (MORPHONS)
NUMBER OF SEQUENCES: 45
CORRESPONDENCE ADDRESS: PATENT ADMINISTRATOR; TESTA, HURWITZ
ADDRESSEE: THIBEAULT, LLP
STREET: 125 HIGH STREET
                   CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/496,398
FILLING DATE: 02-FEB-2000
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                    STREET: 125 H
CITY: BOSTON
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/786,284
FILLING DATE: «Unknown»
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMOUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-102
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                             COUNTRY: US
ZIP: 02110
  APPLICATION NUMBER: US 08/478,097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   57 INPETVPKPCCAPTOLNAIS 76
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USA
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FILING DATE: 22-Feb-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 102 amino acids
TYPE: amino acid
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: (508) 435-9001
TELEFAX: (508) 435-0992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           : YEOLOGY
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Pred. No. 3.7e-07;
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RESULT 6
US-09-754-831A-9
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Publication No. US20030185792A1
GENERAL INFORMATION:
APPLICANT: Keck, P.
TITLE OF INVENTION: MORPHOGEN ANALOGS OF BOND MORPHOGENIC PROTEINS
FILE REPERENCE: CIET-P04-566
CURRENT APPLICATION NUMBER: US/10/164,279
CURRENT APPLICATION NUMBER: 09/791946
PRIOR APPLICATION NUMBER: 09/791946
PRIOR APPLICATION NUMBER: 09/791946
PRIOR APPLICATION NUMBER: 09/791946
PRIOR FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 64
SOFTWARE: Patentin version 3.1
150 ID NO 4
                                                                                                                                                      Sequence 9, Application US/09754831A Publication No. US20030228345A1 GENERAL INFORMATION:
APPLICANT: Oppermann, Herman
APPLICANT: Kuberasampath, Thangavel
APPLICANT: Rueger, David
APPLICANT: Ozkaynak, Engin
TITLE OF INVENTION: Osteogenic Devices
FILE REFERENCE: STK-008CN
CURRENT APPLICATION NUMBER: US/09/754,831A
CURRENT FILING DATE: 2001-01-03
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 102
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 617-248-7100
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDWUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: STK-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: li
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LOCATION: 1..102
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                         57 INPETVPKPCCAPTOLNAIS 76
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                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 111; DB 14; 100.0%; Pred. No. 3.7e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                   Length 102;
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PRIOR APPLICATION NUMBER: US 08/375,901
PRIOR FILING DATE: 1995-01-20
PRIOR FILING DATE: 1993-11-01
PRIOR FILING DATE: 1993-11-01
PRIOR PILING DATE: 1993-11-01
PRIOR PILING DATE: 1993-12-22
PRIOR PILING DATE: 1992-2-3345
PRIOR PILING DATE: 1999-02-23
PRIOR PILING DATE: 1989-02-23
PRIOR PILING DATE: 1989-02-23
PRIOR PILING DATE: 1989-02-23
PRIOR PILING DATE: 1988-03-15
PRIOR APPLICATION NUMBER: US 07/232,630
PRIOR PILING DATE: 1988-04-08
PRIOR APPLICATION NUMBER: US 07/179,406
PRIOR PILING DATE: 1988-04-08
NUMBER OF SEQ ID NOS: 72
SOFTWARE: PATENTIN VETSION 3.0
SEQ ID NO 9
                                                                                                                                                                 US-09-389-705-12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: PRT; ORGANISM: HOMO SAPIEN US-09-813-398-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: UOFMD.003C1
CURRENT APPLICATION NUMBER: US/09/813,398
CURRENT FILING DATE: 2001-03-20
PRIOR APPLICATION NUMBER: PCT/US99/05908
PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: PCT/US98/19772
PRIOR FILING DATE: 1998-09-22
PRIOR FILING DATE: 1998-09-22
NUMBER OF SEQ ID NOS: 41
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: OP1 protein sequence with osteogenic activity
US-09-754-831A-9
                                                                                     Sequence 12, Application US/09389705
Publication No. US20010018509A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Bruce D. Weintraub
APPLICANT: Mariusz W. Szkudlinski
APPLICANT: University of Maryland
TITLE OF INVENTION: CYSTINE KNOT GROWTH FACTOR MUTANTS
                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 20; Conservative 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No. US20020169292A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 30,
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Best Local S
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TYPE: PRT
ORGANISM: mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
            APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                              83
                                                                                                                                                                                                                                                                                       1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62 INPETVPKPCCAPTQLNAIS 81
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                                                                                                                                                                                                                                                              INPETVPKPCCAPTQLNAIS
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                                                                                                                                                                                                                                                              87
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                                                                                                                                                                                                                                                                                                                                                                                                 Length 112;
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Gaps

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Sequence 10, Application US/10115406

publication No. US20020127612A1

GENERAL INFORMATION:

APPLICANT: INFORMATION:

APPLICANT: LEE, Se-Jin

TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9

FILE REFERENCE: JHU1190-3

CURRENT APPLICATION NUMBER: US/10/115,406

CURRENT FILING DATE: 1202-04-02

PRIOR APPLICATION NUMBER: US/9/301,520

PRIOR APPLICATION NUMBER: US/9/31,520

PRIOR FILING DATE: 1999-04-28

PRIOR APPLICATION NUMBER: US/9/31,835

PRIOR APPLICATION NUMBER: US/9/30,835

PRIOR APPLICATION NUMBER: US/9/30685

PRIOR APPLICATION NUMBER: US/9/3/303

PRIOR APPLICATION NUMBER: US/9/3/303

PRIOR APPLICATION NUMBER: US/9/3/303

PRIOR APPLICATION NUMBER: US/9/3/303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: 1..118

SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-09-389-705-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-115-406-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
            NUMBER OF SEQ ID NOS: 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO: 12: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
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MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PATENTIN Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/389,705

FILING DATE: 03-Sep-1999

FILING DATE: 03-Sep-1999

FILING DATE: 03-Sep-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: <UNKnown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/153,733
FILING DATE: <UNKnown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: WETHERELL, JR. Ph.D., JOHN R. REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD2279 PCT TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               l Similarity
20; Conserv
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STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: Protein
LOCATION: 1..118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 118 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INPETVPKPCCAPTQLNAIS 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: (619) 455-5100
TELEFAX: (619) 455-5110
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLONE: OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 111; DB 9; ilarity 100.0%; Pred. No. 4:3e-07; Conservative 0; Mismatches n.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 118;
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                                                                                                                                                                        NAME/KEY: Protein
LOCATION: 1..118
SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-10-154-333-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
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US-10-154-333-12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match 100.0%; Score 111; DB 13; Best Local Similarity 100.0%; Pred. No. 4.3e-07; Matches 20; Conservative 0; Mismatches 0;
                                                                                             Matches
                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 118
TYPE: PRT
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TELEFAX: (619) 4:
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Versi
CURRENT APPLICATION NUMBER: US/10/154,333
FILING DATE: 21-May-2002
CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/09/389,705
FILING DATE: 03-689-1999
APPLICATION NUMBER: 09/153,733
FILING DATE: CURROWN-
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, UR. Ph.D., JOHN R.
REGISTRATION NUMBER: 31,678
PRESENENT/DOCKET NUMBER: 602279 PCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
NUMBER OF SEQUENCES: 29
                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: FD2279 PCT TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73 INPETVPKPCCAPTQLNAIS 92
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73
                                               1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                      Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 118 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                           CLONE: OP-1
                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (619) 455-5100
                                                                                                                   100.0%; Score 111; DB 14; 100.0%; Pred. No. 4.3e-07;
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                                                                                                  0
     92
                                                                                                  Mismatches
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                                                                                                                                               DB 14;
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Gaps

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RESULT 12
US-09-813-459-13
; Sequence 13, Application US/09813459
; Patent NO. US20020107369A1
; GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US 09/301,520
PRIOR FILING DATE: 2002-04-02
PRIOR APPLICATION NUMBER: US 09/301,520
PRIOR FILING DATE: 1999-04-28
PRIOR APPLICATION NUMBER: US 09/172,062
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR FILING DATE: 1995-10-23
PRIOR PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1993-01-12
NUMBER OF SEQ ID NOS: 28
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Best Local Similarity
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Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
FILE REFERENCE: JHUIL90-7
CURRENT APPLICATION NUMBER: US/10/704,223
CURRENT FILING DATE: 2003-11-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: THE JOHNS HOPKINS UNIVERSITY APPLICANT: LEE, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-704-223-10
       COMPUTER REALABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION NUMBER: US/09/813,459

FILING DATE: 20-Mar-2001

CLASSIFICATION : CUNknown>
PRIOR APPLICATION NUMBER: U8/624,635

FILING DATE: (Unknown>
APPLICATION NUMBER: 08/624,635

FILING DATE: VUNKnown>
ATTORNEY/ACENT INFORMATION:
NAME: Wetherell, Jr., Ph.D., John R.,
REGISTRATION NUMBER: 31,678

REGISTRATION NUMBER: 31,678

REGISTRATION NUMBER: 31,678
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TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-10
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                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 1880 Century
CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INPETVPKPCCAPTQLNAIS 92
                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
REFERENCE/DOCKET NUMBER: PD-3054
                                                                                                                                                                                                                                                                                                                                                         ZIP: 90067
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No. US20040152143A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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Pred. No. 4.3e-07;
0; Mismatches 0;
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                                                                          Query Match
Best Local S
Matches 20
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                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 1998-02-05
PRIOR APPLICATION NUMBER: 08/862,445
PRIOR TILING DATE: 1997-05-23
PRIOR PELICATION NUMBER: 08/847,910
PRIOR APPLICATION NUMBER: 08/795,071
PRIOR APPLICATION NUMBER: 08/795,071
PRIOR APPLICATION NUMBER: 08/525,596
                                                                                                                                                                                                                                  SOFTWARE: F
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 40,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 51
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1993-03-19
                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: PCT PRIOR FILING DATE: 1994-03-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/859,211
CURRENT FILING DATE: 2001-05-15
PRIOR APPLICATION NUMBER: 09/019,070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Lee, Se-Jin
APPLICANT: McCherron, Alexandra C.
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
FILE REFERENCE: 07265/144001
                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 08/033,923
                                                                                                                                                                      LENGTH: 119
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: 1..119
SEQUENCE DESCRIPTION: SEQ ID NO: 13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION:
74 INPETVPKPCCAPTQLNAIS 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       al Similarity 100.
20; Conservative
                      1 INPETVPKPCCAPTQLNAIS 20
                                                                          l Similarity
20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLONE: OP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
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TELEFAX: (619)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/09859211
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENGTH: 119 amino acids
                                                                          100.0%; Score 111; DB 9; Length 119; Llarity 100.0%; Pred. No. 4.3e-07; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 111; DB 9; 100.0%; Pred. No. 4.3e-07;
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; Sequence 18, Application US/09880708 ; Patent No. US20020165361A1

RESULT 14 US-09-880-708-18

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APPLICANT: McPherron, Alexandra
TITLE OF INVENTION: Growth Differentiation Factor-8
FILE REFERENCE: JHU1120-17
CUTRENT APPLICATION NUMBER: US/09/872,856
CUTRENT FILING DATE: 2001-06-01
PRIOR APPLICATION NUMBER: US 09/124,180
PRIOR PILING DATE: 1998-07-28
PRIOR PILING DATE: 1998-07-08
PRIOR APPLICATION NUMBER: US 09/019,070
PRIOR PILING DATE: 1998-02-05
PRIOR PILING DATE: 1998-02-05
PRIOR PILING DATE: 1998-02-05
PRIOR FILING DATE: 1998-02-05
PRIOR FILING DATE: 1997-05-23
PRIOR FILING DATE: 1997-05-23
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                    SENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                            APPLICANT: Johns Hopkins University School of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: 18: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 92121-2189
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 09/145,060
FILING DATE: <UNKNOWN-
APPLICATION NUMBER: 08/003,144
FILING DATE: 12-JAN-1993
ATTORNBY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Gray Cary Ware & Freidenrich LLP
STREET: 4365 Executive Drive, Suite 1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 12-Jun-2001 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA: DS/09/880,708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Lee,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE DESCRIPTION: SEQ ID NO: 18:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   74 INPETVEKECCAPTOLNAIS 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLONE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Lisa A. Haile, Ph.D. REGISTRATION NUMBER: 38,347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: San Diego
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 119 amino acids
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                                                                                                                                                                                                                                                                                          Lee, Se-Jin
                                      ATION NUMBER: US 08/847,910
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08/795,071
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Pred. No. 4.3e-07;
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; ORGANISM: Homo sapiens US-09-872-856-40
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LENGTH: 119
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Publication No.
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Best Local Similarity
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PRIOR FILING DATE: 1994-03-18
PRIOR APPLICATION NUMBER: US 08/033,923
PRIOR FILING DATE: 1993-03-19
NUMBER OF SEQ ID NOS: 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1997-02-05
PRIOR APPLICATION NUMBER: US 08/525,596
PRIOR FILING DATE: 1995-10-25
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                                                              INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                            PRIOR APPLICATION UNMBER: US/09/177,860
APPLICATION NUMBER: US/09/177,860
FILING DATE: <USKNOWN'
APPLICATION NUMBER: 08/525,596
FILING DATE: 19-SEP-1995
APPLICATION NUMBER: PCT/US94/07762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
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COMPUTER READABLE FORM:
COMPUTER READABLE Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
                                                                                                                                            NAME: Wetherell, Jr., Ph.D, John R. REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: 07265/075001
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8 NUMBER OF SEQUENCES: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Huynh,
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                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/10/335,483 FILING DATE: 31-Dec-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: CA
                       TYPE: amino acid
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TOPOLOGY:
                                           LENGTH: 119 amino acids
                                                                                                       TELEFAX: 619-678-5099
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Pred. No. 4.3e-07;
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FEATURE

NAME/KEY: Protein

MOLECULE TYPE: protein IMMEDIATE SOURCE:

CLONE: OP-1

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i SEQUENCE DESCRIPTION: SEQ ID NO: 22:

US-10-335-483-22
                                                                                                                                                                   US-10-693-536-12; Sequence 12, Application US/10693536; Publication No. US20040067556A1
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PRIOR ETILING DATE: 1993-03-19
NUMBER OF SEQ ID NOS: 53
SOFTWARE: Patentin version 3.1
SEQ ID NO 40
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Best Local
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APPLICANT: Johns Hopkins University School of Medicine
APPLICANT: Lee, Se-Jin
APPLICANT: McDearce Alexandra
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Sequence 40, Application US/10463973
Publication No. US20040055027A1
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Best Local Similarity
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PRIOR FILING DATE: 2001-66-01
PRIOR APPLICATION NUMBER: US 09/124,180
PRIOR FILING DATE: 1998-07-28
PRIOR APPLICATION NUMBER: US 09/019,070
PRIOR APPLICATION NUMBER: US 08/862,445
PRIOR PRIOR DATE: 1998-02-05
PRIOR PRIOR DATE: 1998-02-05
PRIOR APPLICATION NUMBER: US 08/862,445
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                                                                                                                              GENERAL INFORMATION:
APPLICANT: Lee, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1997-02-05
PRIOR APPLICATION NUMBER: US 08/525,596
PRIOR FILING DATE: 1995-10-25
        Huynh, Thanh
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 1997-05-23
APPLICATION NUMBER: US 08/847,910
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APPLICATION NUMBER: US 08/795,071
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20; Conserv
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CITY: La Jolla
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ilarity 100.0%;
Conservative 0
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Pred. No. 4.3e-07;
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US-10-758-210-12
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HUYNH, Thanh
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FILE REFERENCE: JHU1130-2
CURRENT APPLICATION NUMBER: US/10/758,210
CURRENT FILING DATE: 2004-01-14
PRIOR APPLICATION NUMBER: US/09/412,791D
PRIOR APPLICATION NUMBER: US 08/581,528
PRIOR PILING DATE: 1999-00-09
PRIOR PILING DATE: 1996-01-09
PRIOR PILING DATE: 1996-07-09
PRIOR APPLICATION NUMBER: US 08/581,799
PRIOR APPLICATION NUMBER: PCT/US94/07799
PRIOR TILING DATE: 1994-07-08
NUMBER OF SEQ ID NOS: 21
SOFTWARE: Patentin version 3.0
SEQ ID NO 12
LENGTH: 119
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 12, Application US/10758210 Publication No. US20040127696A1
                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: ANTIBODIES BINDING TO GROWTH DIFFERENTIATION FACTOR-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (619) 6' INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/09/619,061
FILING DATE: 18-Jul-2000
APPLICATION NUMBER: US/09/097,616
FILING DATE: 15-UN-1998
APPLICATION NUMBER: US 08/581,529
FILING DATE: 15-APR-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 1..119
SEQUENCE DESCRIPTION: SEQ ID NO: 12:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Lisa A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: OTTELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/693,536
FILING DATE: 23-Oct-2003
CLASSIFICATION: <Unknown>
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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:

LENGTH: 119 amino acids
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                                                   TELEPAX: 617/2%
TELEPAX: 617/2%
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                       FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-WAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/752,764
APPLICATION NUMBER: US 07/752,764
                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: PANG, ROY HL
APPLICANT: COHEN, CHARLES I
TITLE OF INVENTION: MORPHOO
TITLE OF INVENTION: REPAIR
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                        FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                               MOLECULE TYPE: protein ORIGINAL SOURCE:
                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000
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STREET: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                       REGISTRATION NUMBER: 27
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
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ISSUE TYPE:
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20; Conservative
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55 STATE STREET
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OPPERMANN, HERMANN
OZKAYNAK, ENGIN
PANG, ROY HL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 111; DB 16; 100.0%; Pred. No. 4.3e-07;
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                                                                                                                                                                                                                                                                                                                                                                                                               US/07/922,813
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                                                                                                                                                                                                                                27,829
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; LOCATION: 1..139
; OTHER INFORMATION:
US-08-260-675-5
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                                                                                                      US-09-882-875A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US
Patent No. US20020151985A1
GENERAL INFORMATION:
APPLICANT: KUBERASA
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Best Local Similarity
Matches 20; Conserv
                                 Matches
                                                                 Query Match
                                                  Best Local
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INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 09/104,865
FILING DATE: 25-JUN-1998
APPLICATION NUMBER: US 08/443,676
FILING DATE: 18-MAY-1995
APPLICATION NUMBER: US 07/529,852
FILING DATE: 29-MAY-1990
ATTORNEY/AGENT INFORMATION:
NAME: VITO, Christine C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Vers
SOFTWARE: PATENTION DATA:
APPLICATION NUMBER: US/09/882,875A
FILING DATE: 15-Jun-2001
CITATION DATE: 15-Jun-2001
                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: STK-049CN2
TELECOMMUNICATION INFORMATION:
TELEPHNE: (617) 248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: SYNTHETIC BONE MATRIX NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: peptide SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
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1 INPETVEKECCAPTOLNAIS 20
                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/09882875A
                                                                                                                                                                         TYPE: amino acid
STRANDEDNESS: <U
                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 39,061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Patent Administrator, Testa, Hurwitz & Thibeault, LLP
                                                                                                                                                                                                          LENGTH: 139 amino acids
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                                   Mismatches
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INPETVPKPCCAPTQLNAIS 113

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US-10-050-050-5
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-952-318A-5
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CURRENT FILING DATE: 2001-09-13
PRIOR APPLICATION NUMBER: 09/170,936
PRIOR FILING DATE: 1998-10-13
PRIOR PELICATION NUMBER: 08/432,883
PRIOR FILING DATE: 1995-05-02
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR PILING DATE: 1993-09-01
PRIOR PILING DATE: 1993-09-01
PRIOR APPLICATION NUMBER: 07/923,780
PRIOR APPLICATION NUMBER: 07/923,780
PRIOR APPLICATION NUMBER: 07/923,780
PRIOR PILING DATE: 1992-07-31
PRIOR APPLICATION NUMBER: 07/752,847
PRIOR FILING DATE: 1991-08-30
PRIOR FILING DATE: 1991-08-30
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SEQ ID NO 5
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TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS IN
TITLE OF INVENTION: METABOLIC BONE DISEASE
FILE REFERENCE: JJJ.-P06-522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 07/667,274 PRIOR FILING DATE: 1991-03-11
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-CDGS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ver
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/050,050
FILING DATE: 15-Jan-2002
CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/08/461,113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 33
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                                                                                                                                                                                                                                                                                                                          CITY: HOPKINTON STATE: MA
                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                          COUNTRY: USA
ZIP: 01748
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OZKAYNAK,
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KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
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                                                                                                                                                        Version #1.30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-366-345-63; Seguence 63, Application US/10366345; Publication No. US20030224501A1
                                                                                                                                                                                               US-10-108-260A-2783
                                                                                                                                                                                                                 RESULT 25
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US-10-366-345-63
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Sequence 2783, Application US/10108260A
Publication No. US20040005560A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20040005560A1e1 full length cDNA
FILE REFERENCE: H1-A0106
CURRENT APPLICATION NUMBER: US/10/108,260A
CURRENT FILING DATE: 2002-03-27
NUMBER OF SEQ ID NOS: 5458
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn version 3.2
SEQ ID NO 63
LENGTH: 139
TYPE: PRT
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APPLICANT: Young, et al.
APPLICANT: Young, et al.
TITLE OF INVENTION: Bone Morphogenetic Protein Polynucleotides, Polypeptides and
TITLE OF INVENTION: Antibodies
FILE REFERENCE: PT189
CURRENT APPLICATION NUMBER: US/10/366,345
CURRENT FILLING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 77
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Best Local Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: FENTON ESq., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
TELECOMMUNICATION INFORMATION:
TELEPHONE: (508) 435-9001
TELEFAX: (508) 435-6951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: <Unknown>
APPLICATION NUMBER: US 08/445,882
FILING DATE: 22-WAY-1995
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
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OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 139 amino acids
TYPE: amino acid
STRANDEDNESS: single
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ilarity 100.0%;
Conservative (
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Pred. No. 5e-07;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                   Score 111; DB 1
Pred. No. 5e-07;
                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                        DB 14;
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                                                                                                                                                                                                                                                                                                                                                                                        Length 139;
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RESULT 27
US-09-765-527-249
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US-10-385-064-5
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LENGTH: 139
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                              Sequence 249, Application US/09765527 Patent No. US20020006638A1 GENERAL INFORMATION:

APPLICANT: Better, Marc D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
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Publication No. US20040102373A1
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Best Local
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LENGTH: 139
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TITLE OF INVENTION: Protein Induced Morphogenesis
FILE REFERENCE: CEM-2 DIV (00960-502 DIV)
CURRENT APPLICATION NUMBER: US/10/385,064
CURRENT FILING DATE: 2003-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US/09/464,206
PRIOR FILING DATE: 1999-12-15
PRIOR APPLICATION NUMBER: 08/396,684
PRIOR FILING DATE: 1995-03-01
NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Cohen, Charles M.
APPLICANT: Kuberasampath, Thangavel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: 1BW PC compatible
COMPUTER: 1BW PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'To
                                                                                                                                                                                                                                                       TITLE OF INVENTION: Methods for Recombinant Microbial Production Fusion Proteins and BPI-Derived Peptides
                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94 INPETVEKECCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                   94 INPETVEKECCAPTQLNAIS 113
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l Similarity 100.0%;
20; Conservative 0
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                                                                                                CITY: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
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                                                                                                                                                                                                                                                                                            Better, Marc D.
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Pred. No. 5e-07;
Mismatches 0;
                                                                                                                                                                         O'Toole, Gerstein, Murray & Borun
Ower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 139;
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HOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 249: US-09-765-527-249
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                                                                                                                                                                                                                                     RESULT 29
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APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
APPLICANT: Gavit, Patrick D.
TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
TITLE REFERENCE: 1103/11.041U501
CURRENT FILING DATE: 2001-01-12
CURRENT FILING DATE: 2001-01-12
PRIOR APPLICATION NUMBER: 09/271,970
PRIOR APPLICATION NUMBER: 09/271,970
PRIOR FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 2
                                                                                                                                              Sequence 2, Application US/10324182 Publication No. US20030194782A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/09760397 Patent No. US20020009781A1
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Best Local Similarity
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                    APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
APPLICANT: Gavit, Patrick D.
TITLE ONLY OF THE PROPERTY OF THE PROPERTY OF THE REFERENCE: 1103/11041US01
CURRENT APPLICATION NUMBER: US/10/324,182
CURRENT FILING DATE: 2002-12-20
PRIOR APPLICATION NUMBER: US/09/271,970
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TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 249:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                          Local
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FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/09/765,527
FILING DATE: 18-Jan-2001
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Borun, Michael F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 277
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312,474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  116 INPETVPKPCCAPTQLNAIS 135
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k; Pred. No. 5.7e-07;
0; Mismatches 0;
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Publication No. US20030069401A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
SOFTWARE: PATENTIN VET. 2.0
SEQ ID NO 2
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Best Local
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TYPE: PRT
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: OPPERMANN, HERMANN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
CLASSIFICATION: CUKNOWN>

APPLICATION DATA:
                    APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: MASSACHUSETTS
                                                          APPLICATION NUMBER: US 483,913
                                                                            FILING DATE: 20-AUG-1990
                                                                                                 APPLICATION NUMBER: US
                                                                                                                  FILING DATE: 07-SEP-1990
                                                                                                                                  APPLICATION NUMBER: US 579,865
                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                              APPLICATION NUMBER: US 600,024 FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 621,849
                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: U.S.A.
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STREET: 53 STATE STREET
                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 621,988
                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 22-FEB-1991
                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 660,162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/447,570
                                                                                                                                                                                                                                      TLING DATE:
                                                                                                                                                                                                                                                PPLICATION NUMBER: US 616,374
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                                                                                                                                                                                                                                                                             LING DATE:
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RUEGER, DAVID C,
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OZKAYNAK, ENGIN
THANGAVEL
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                                       22-FEB-1990
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Pred. No. 5.7e-07;
Mismatches 0;
                    422,613
                                                                                               569,920
                                                                                                                                                                            599,543
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MOLECULE TYPE: protein
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SEQUENCE DESCRIPTION: SEQ ID NO: 9:
US-08-957-425-9
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US-10-321-799-9
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Best Local Similarity
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TELEPHONE: 617/248-7000
TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                  ZIP: 02110

ZIP: 02110

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Ve:

SOFTWARE: Patentin Release #1.0, Ve:

APPLICATION DATA:

APPLICATION: UNMBER: US/10/321,799

FILING DATE: 17-Dec-2002

CLASSIFICATION: CUNKNOWN>

PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
ATTORNEY AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWI'
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      124 INPETVPKPCCAPTQLNAIS 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 INPETVPKPCCAPTQLNAIS 20
                                                                      APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
APPLICATION NUMBER: US 08/147,023
FILING DATE: 1-NOV-1993
APPLICATION NUMBER: US 07/841,646
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
                      APPLICATION NUMBER: US 07/579,865 FILING DATE: 7-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 169 amino acids TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-001CP6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: U.S.A.
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RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OZKAYNAK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
NUMBER: US 07/621,849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ROY H.L.
                                                          28-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ENGIN
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Pred. No. 6e-07;
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; LENGTH: 169 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
sEQUENCE DESCRIPTION: SEQ ID NO:
US-10-321-799-9
                                                                                                                                                                                                                                                                                                                                  US-10-428-997A-9
                                                                                                                                                                                                                           Sequence 9, Application US/10428997A
Publication No. US20040077546A1
GENERAL INFORMATION:
APPLICANT: OPPERMANN, HERMANN
OZKAYNAK, ENGIN
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/660,162
FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 07/422,699
FILING DATE: 17-0CT-1989
APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-0CT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-0CT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-0CT-1989
ATTORNEY/AGENT INFORMATION:
NAME: DIANA M. STEEL
PROTECTION NUMBER: 43-152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET
                                                                                                                                  TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                               124 INPETVPKPCCAPTQLNAIS 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
                                                                                                                                                                                                                                                                                                                                                                                                                                      1 INPETVPKPCCAPTQLNAIS 20
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APPLICATION NUMBER: US 07/621,988
FILING DATE: 4-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: 43,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 07/483,913 FILING DATE: 22-FEB-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 07/600,024 FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 07/810,560 FILING DATE: 20-DEC-1991 APPLICATION NUMBER: US 07/569,920 FILING DATE: 20-AUG-1990
STATE: MASSACHUSETTS COUNTRY: U.S.A. ZIP: 02110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 617/248-7100
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ILING DATE: 23-FEB-1989
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PLICATION NIMPER
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LING DATE: 21-NOV-1990
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                                                                                                                                                                                              KUBERASAMPATH, TI
RUEGER, DAVID C.
                                                                                                                                                                             ROY H.L
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Pred. No. 6e-07;
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                                                                                                             TOPOLOGY: linear

MOLECULE TYPE: procein

SEQUENCE DESCRIPTION: SEQ ID NO:
US-10-428-997A-9
                                             Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                         TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 9: SEQUENCE CHARACTERISTICS:
                                           Local Similarity
es 20; Conserv
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APPLICATION NUMBER: US 08/957,425
FILING DATE: 24-OCT-1997
APPLICATION NUMBER: US 08/447,570
FILING DATE: 23-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
          1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 07/
FILING DATE: 20-AUG-1990
APPLICATION NUMBER: US 07/
FILING DATE: 18-OCT-1990
FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US OFFILING DATE: 15-AUG-1988
APPLICATION NUMBER: US OFFILING DATE: 23-FEB-1985
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 02-May-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 07/579,865 FILING DATE: 7-SEP-1990 APPLICATION NUMBER: US 07/621,849
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FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/810,560
FILING DATE: 20-DEC-1991
                                                                                                                                                                                                      LENGTH: 169 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 48,645
                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 0
FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                  NAME: BRIAN FAIRCHILD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US
FILING DATE: 17-OCT-198
APPLICATION NUMBER: US
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ILING DATE: 1-NOV-1993
PPLICATION NUMBER: US 07/841,646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ILING DATE: 23-FEB-1989
PPLICATION NUMBER: US 0
ILING DATE: 22-FEB-1991
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LING DATE: 22-FEB-1990
PLICATION NUMBER: US 0
LING DATE: 08-APR-1988
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                                               Conservative
                                                              100.0%; Score 111;
100.0%; Pred. No. 6
                                               0; Mismatches
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                                                                    6e-07;
                                                                                        DB 15;
                                                                                      Length 169;
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RESULT 35
US-09-765-527-257
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; ORGANISM: Human
US-10-324-182-8
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US-09-760-397-8
                                                                             Sequence 257, Application US/09765527 Patent No. US20020006638A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 8, Application US/10324182
Publication No. US20030194782A1
GENERAL INFORMATION:
APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
APPLICANT: Information: Information of the Production of the Production of the Production of the Production of the Reference: 1103/11041US01
CURRENT TAPLICATION NUMBER: US/10/324,182
CURRENT FILING DATE: 2002-12-20
PRIOR APPLICATION NUMBER: US/99/271,970
PRIOR FILING DATE: 1999-03-18
NIMBER DE GEO TO NOC. 12
                                                                                                                                                                                                                                                                                              Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 8, Application US/09760397 Patent No. US20020009781A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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CURRENT FILING DATE: 2001-01-12
PRIOR APPLICATION NUMBER: 09/271,970
PRIOR FILING DATE: 1999-03-18
NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
FILE REFERENCE: 1103/11041US01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Ver.
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ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                              ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ENGTH: 178
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APPLICANT: Better, Marc D.
TITLE OF INVENTION: Methods for Recombinant Microbial Production of
Fusion Proteins and BPI-Derived Peptides
NUMBER OF SEQUENCES: 265
                                                                                                                                                                                                                     116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  116 INPETVPKPCCAPTQLNAIS 135
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20; Conserv
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20; Conserv
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Pred. No. 6.3e-07;
); Mismatches 0;
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Pred. No. 6.3e-07
                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                 DB 14;
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RESULT 36
US-09-765-527-261
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Best Local Similarity
Matches 20; Conser
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Patent No. US20020006638A1
GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 257:
SEQUENCE CHARACTERISTICS:
                                                                                                            COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PATENT PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Ve
CURRENT APPLICATION DATA:
                                                PRIOR
                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 26 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 257:
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FILING DATE: 18-Jan-2001
PRIOR APPLICATION DATA:
APPLICATION UMBER: 08/621,803
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Better, Marc D. TITLE OF INVENTION: Method
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION: TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     116 INPETVPKPCCAPTQLNAIS 135
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APPLICATION NUMBER: 08/621,803 FILING DATE: <Unknown>
                                           APPLICATION NUMBER: US/09/765,527
FILING DATE: 18-Jan-2001
APPLICATION DATA:
                                                                                                                                                                                                                                                                                                STREET: 6300 Sears Tower,
CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                         SPONDENCE ADDRESSEE: Marshall, O'Toole,
ADDRESSEE: Marshall, O'Toole,
233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 179 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Borun, Michael F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 312/474-0448
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Chicago
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60606-6402
                                                                                                                                                                                                                                                                                                                                                                                                                                     Methods for Recombinant Microbial Production Fusion Proteins and BPI-Derived Peptides
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                                                                                                                                                                                                                                                                                                                                            Gerstein, Murray & Borun
South Wacker Drive
                                                                                                                                      Version #1.25
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RESULT 37
US-09-760-397-14
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Sequence 14, Application US/10324182
Publication No. US20030194782A1
GENERAL INFORMATION:
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APPLICANT: Better, Marc D.

APPLICANT: Gavit, Patrick D.

APPLICANT: Gavit, Patrick D.

TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production FILE REFERENCE: 1103/11041US01

FILE REFERENCE: 1103/11041US01

CURRENT FILING DATE: 2001-01-12

CURRENT FILING DATE: 2001-01-12

PRIOR APPLICATION NUMBER: 09/271,970

PRIOR APPLICATION NUMBER: 09/271,970

PRIOR APPLICATION NUMBER: 09/271,970

PRIOR FILING DATE: 1999-03-18

NUMBER OF SEQ ID NOS: 16

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 20; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 14, Application US/09760397 Patent No. US20020009781A1
                                 APPLICANT: Better, Marc D.
APPLICANT: Gavit, Patrick D.
APPLICANT: Gavit, Patrick D.
TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production
FILE REFERENCE: 1103/11041US01
CURRENT FILING DATE: 2002-12-20
PRIOR APPLICATION NUMBER: US/09/271,970
PRIOR APPLICATION NUMBER: US/09/271,970
PRIOR FILING DATE: 1999-03-18
NUMBER OF SEQ ID NO5: 16
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 14
LENGTH: 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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INFORMATION FOR SEQ ID NO: 261:
SEQUENCE CHARACTERISTICS:
LENGTH: 179 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 190
TYPE: PRT
ORGANISM: Human
ORGANISM: Human
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REFERENCE/DOCKET NUMBER: 27:
TELECOMMUNICATION IMPORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 261:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 111; DB 9; Length 190; ilarity 100.0%; Pred. No. 6.7e-07; Conservative 0; Mismatches 0; Indels
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Pred. No. 6.3e-07;
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; TOPOLOGY: Tinear;
; MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 255:
US-09-765-527-255
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                                                                            Sequence 263, Application US/09765527
Patent No. US20020006638A1
GENERAL INFORMATION:
                                                                                                                                         RESULT 40
US-09-765-527-263
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Best Local Similarity
Matches 20; Conserv
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Patent No. US20020006638A1
GENERAL INFORMATION:
GENERAL INFORMATION:
Methods for Recombinant Microbial Production
TITLE OF INVENTION: Methods for BPI-Derived Peptides
                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 255:
SEQUENCE CHARACTERISTICS:
LENGTH: 194 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 08/621,803
APPLICATION NUMBER: 08/621,803
APPLICATION NUMBER: 08/621,803
APPLICATION NUMBER: 25,447
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27129/33199
TELEPHONE: 312/474-6300
TELEPHONE: 312/474-6300
TELEPAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: United States of America ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/765,527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
NUMBER OF SEQUENCES:
                                         APPLICANT: Better, Marc D. TITLE OF INVENTION: Method
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                116 INPETVPKPCCAPTQLNAIS 135
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                                                                                                                                                                                                                                                                                                         100.0%; Score 111; DB 9; ilarity 100.0%; Pred. No. 6.8e-07; Conservative 0; Mismatches 0;
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                     Methods for Recombinant Microbial Production of Fusion Proteins and {\tt BPI-Derived} Peptides
    Fusion Proteins and : 265
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                                                                                                                                                                                                                                                                                                                                                       Length 194;
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US-08-957-425-11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 11, Application US/08957425 Publication No. US20030069401A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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INFORMATION FOR SEQ ID NO: 263:
SEQUENCE CHARACTERISTICS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
CLASSIFICATION: CUNKNOWN>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 08/621,803
FILING.DATE: «Unknown»
ATTORNEY/AGENT INFORMATION:
NAME: BOTUN, MICHAEl F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27129/33199
TELECHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                         PANG, ROY H.I.

TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: OPPERMANN, HERMANN
OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/09/765,527
FILING DATE: 18-Jan-2001
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 263:
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ADDRESSEE: Marshall,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             116
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                                                                                                                                                                                                                                                ADDRESSEE: TESTA, HURWI
STREET: 53 STATE STREET
CITY: BOSTON
STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INPETVPKPCCAPTQLNAIS 135
                                                                                                                                                                                                           ZIP: 02109
                                                                                                                                                                                                                              COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 195 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: United States of America
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6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Su
, 100.0%; Pr,
                                                                                                                                                                                                                                                                                                            HURWITZ & THIBEAULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 111; DB 9;
Pred. No. 6.9e-07;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 195;
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TOPOLOGY: linear

MOLECULE TYPE: Procein

SEQUENCE DESCRIPTION: SEQ ID NO:
US-08-957-425-11
                                                                                                                                                                                                                                                                                        RESULT 42
US-10-321-799-11
                                                                                                                                                                                                                          Sequence 11, Application US/10321799
Publication No. US20030224996A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 179
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,82
             PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET
                                                                                                                                                                                                      APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                             272 INPETVPKPCCAPTQLNAIS 291
                                                                                                                                                                                                                                                                                                                                                                                                          1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 422,613
FILING DATE: 17-0CT-1989
APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 317 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 569,920 FILING DATE: 20-AUG-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/08/447,570
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 232,630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 07-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 21-NOV-1990
APPLICATION NUMBER: US 600,024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 827,052 FILING DATE: 28-JAN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 483,913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 599,543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 616,374
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 621,849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 660,162
                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 111; DB 8; ilarity 100.0%; Pred. No. 1.1e-06; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATION NUMBER: US 621,988
                                                                                                                                          KUBERASAMPATH, THANGAVEL RUEGER, DAVID C.
                                                                                                                                                                                  OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-OCT-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 317;
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Gaps

STATE: MASSACHUSETTS
COUNTRY: U.S.A.
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk

SOFTWARE: Patentin R CURRENT APPLICATION DATA:

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MG-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25

APPLICATION NUMBER: US/10/321,799
FILING DATE: 17-Dec-2002
CLASSIFICATION: -Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
APPLICATION NUMBER: US 08/147,023
FILING DATE: 1-NOV-1993
APPLICATION NUMBER: US 07/841,646
FILING DATE: 21-FEB-1992

APPLICATION NUMBER: US 07/621,849 FILING DATE: 4-DEC-1990

PPLICATION NUMBER: US 07/621,988

CATION NUMBER: US 07/810,560

4-DEC-1990 TUMBER: US 0 20-DEC-1991 TUMBER: US 0 20-AUG-1990 APPLICATION NUMBER: US 07/579,865

LING DATE: 7-SEP-1990

PPLICATION NUMBER: US 07/827,052 ILING DATE: 28-JAN-1992

APPLICATION NUMBER: US 07/569,920

CATION NUMBER: US 07/600,024

ING DATE:

CATION NUMBER: US

CATION NUMBER: US

CATION NUMBER: US

07/599,543 90 07/616,374 90 07/483,913 ING DATE:

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RESULT 43
US-10-428-997A-11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn R CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS: ADDRESSE: TESTA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PANG, ROT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: OPPERMANN, HERMÂNN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               272
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/10/428,997A FILING DATE: 02-May-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 0: FILING DATE: 23-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 24-OCT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/10428997A
IO. US20040077546A1
                                                                                                                                                                 APPLICATION NUMBER: US FILING DATE: 21-NOV-199 APPLICATION NUMBER: US
                                                                                                                                                                                                                    APPLICATION NUMBER: US 07
FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07
FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                   PELICATION NUMBER: US 07/621,988
VILING DATE: 4-DEC-1990
PPLICATION NUMBER: US 07/810,560
VILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                      TILING DATE: 28-JAN-1992
PPLICATION NUMBER: US 07/579,865
PILING DATE: 7-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ILING DATE: 21-FEB-1994
PPLICATION NUMBER: US 07/827,052
PPLICATION NUMBER: US 07/827,052
                                                                                                                                                                                                                                                                                                   PPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                     PPLICATION NUMBER: US 07/621,849
TLING DATE: 4-DEC-1990
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                                                                                               PPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PPLICATION NUMBER: US
                                                                                                               PLICATION NUMBER: US 07/179,406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ICATION NUMBER: US 08/147,023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KUBERASAMPATH, T
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ROY H.L.
ON: OSTEOGENIC DEVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HURWITZ & THIBEAULT
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                                US 07/660,162
US 07/422,699
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                                                                                                                                                                   07/483,913
                                                                                                                                                                                                                                                                    07/600,024
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                                                                07/315,342
                                                                                                  07/232,630
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US-10-321-799-11

MOLECULE TYPE: protein seQUENCE DESCRIPTION: SEQ ID NO:

11:

TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS:

LENGTH:

TELEPHONE: 617/248-7000

NAME: DIANA M. STEEL REGISTRATION NUMBER: 43,153 REFERENCE/DOCKET NUMBER: ST

STK-001CP6C3

ATTORNEY/AGENT INFORMATION:

APPLICATION NUMBER: US 07/422,623 FILING DATE: 17-OCT-1989

FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 0
FILING DATE: 17-OCT-1989

US 07/422,613

ILING DATE: 22-FEB-1991
PPLICATION NUMBER: US 07/422,699

CATION NUMBER: US 07/660,162

CATION NUMBER:

07/315,342

CATION NUMBER: US 07/179,406 G DATE: 08-APR-1988 CATION NUMBER: US 07/232,630

Query Match Best Local Similarity

100.0%;

Score 111; DB 14; Pred. No. 1.1e-06;

Length 317;

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RESULT 44
US-08-957-425-15
US-08-957-425-15
Sequence 15, Application US/08957425
Publication No. US20030069401A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-428-997A-11
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: BRIAN FAIRCHILD
REGISTRATION NUMBER: 48,645
REFERENCE/DOCKET NUMBER: STK-015C1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     272 INPETVPKPCCAPTQLNAIS 291
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                APPLICATION NUMBER: US/08/447,570 FILING DATE: 21-FEB-1992 APPLICATION NUMBER: US 810,560 FILING DATE: 20-DEC-1991 APPLICATION NUMBER: US 827,052 FILING DATE: 28-DAN-1992
                                                                                 APPLICATION NUMBER: US 660,162
FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 621,988
FILING DATE: 04-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: BOSTON
STATE: MASSACHUSETTS
                                        APPLICATION NUMBER: US 621,849 FILING DATE: 04-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: U.S.A.
ZIP: 02109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: TESTA, HURWI
STREET: 53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 317 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
ilarity 100.0%;
Conservative (
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OZKAYNAK, ENGIN
THANGAVEL
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RUEGER, DAVID C.
                      NUMBER: US 616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ROY H.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HURWITZ & THIBEAULT
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Pred. No. 1.1e-06;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 15;
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TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 15:
US-08-957-425-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 45
US-10-321-799-15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15, Ap
Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve:
SOFTWARE: Patentin Release #1.0, Ve:
APPLICATION DATA:
APPLICATION NUMBER: US/10/321,799
FILING DATE: 17-Dec-2002
CLASSIFICATION: CINKNOWN>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 232,630
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWI
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                 PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        363 INPETVPKPCCAPTQLNAIS 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 INPETVPKPCCAPTQLNAIS 20
APPLICATION NUMBER: US 09/148,925
                                                                                                                                                                                                                                       COUNTRY: U.S.A. ZIP: 02110
                                                                                                                                                                                                                                                                             STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                    CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 422,613
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 315,342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 600,024
FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 599,543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 569,920 FILING DATE: 20-AUG-1990 APPLICATION NUMBER: US 483,913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/10321799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 22-FEB-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 07-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US20030224996A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                         OPPERMANN, CORRAYNAK, ENGIN
OZKAYNAK, ENGIN
THANGAVEL
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RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                          HURWITZ & THIBEAULT
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                                                                                                                            Version #1.25
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GENERAL

Matches

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SEQUENCE DESCRIPTION: SEQ ID NO: 15: US-10-321-799-15
                                                                          US-10-428-997A-15
, Sequence 15, Application US/10428997A
, Publication No. US20040077546A1
, GENERAL INFORMATION:
                                                                                                                                                                                                                 RESULT 46
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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SEQUENCE CHARACTERISTICS:
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TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                      363 INPETVPKPCCAPTQLNAIS 382
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FILING DATE: 1-NOV-1993
APPLICATION NUMBER: US 07/841,646
FILING DATE: 21-EB-1992
APPLICATION NUMBER: US 07/827,052
FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 07/579,865
FILING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/620,920
FILING DATE: 20-AUG-1991
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-AUG-1990
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-AUG-1990
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FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/599,543
FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/616,374
FILING DATE: 21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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APPLICATION NUMBER: US 0
FILING DATE: 24-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: DIANA M. STEEL REGISTRATION NUMBER: 43,153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/422,699
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
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FILING DATE: 08-APR-1988
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LING DATE: 15-AUG-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LING DATE: 23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LICATION NUMBER: US 07/660,162
ING DATE: 22-FEB-1991
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ING DATE: 22-FEB-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATION NUMBER: US 07/232,630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATION NUMBER: US 07/315,342
OPPERMANN, HERMANN
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US 07/179,406
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                  TELEPHONE: 617/248-700
TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS: ADDRESSE: TESTA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                       FILING DATE: 17-OCT-19
ATTORNEY/AGENT INFORMATION:
                                                                                                                                   TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 07/179,406
FILING DATE: 08-APR-1988
APPLICATION NUMBER: US 07/232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 07/315,342
FILING DATE: 23-FEB-1989
APPLICATION NUMBER: US 07/505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PILING DATE: 1-NOV-1933

APPLICATION UNMEER: US 07/827,052

FILING DATE: 21-FEB-1992

FILING DATE: 28-JAN-1992

FILING DATE: 28-JAN-1992

FILING DATE: 28-JAN-1992

APPLICATION NUMBER: US 07/579,865

FILING DATE: 7-SEP-1990

APPLICATION NUMBER: US 07/621,849

FILING DATE: 4-DEC-1990

APPLICATION NUMBER: US 07/621,988

FILING DATE: 4-DEC-1990

APPLICATION NUMBER: US 07/621,988

FILING DATE: 20-DEC-1991

APPLICATION NUMBER: US 07/869,920

FILING DATE: 20-DEC-1990

FILING DATE: 20-DEC-1990

FILING DATE: 20-DEC-1990

FILING DATE: 20-DEC-1990

FILING DATE: 20-DEC-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OF INVENTION: OSTEOGENIC DEVICES R OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 24-OCT-1997
APPLICATION NUMBER: US 08/447,570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 02-May-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 08/957,425
                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US.07/422,699
FILING DATE: 17-CCT-1989
APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-CCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-CCT-1989
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 23-MAY-1995
APPLICATION NUMBER: US 08/147,023
FILING DATE: 1-NOV-1993
                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 07 FILING DATE: 18-OCT-1990 APPLICATION NUMBER: US 07 APPLICATION NUMBER:
                                                                                                                                                                                                                                               REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PPLICATION NUMBER: US 07/616,374
ILING DATE: 21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       [LING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PLICATION NUMBER: US 0
LING DATE: 22-FEB-1991
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KUBERASAMPATH,
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                                                                                                                                                                                                          48,645
BER: STK-015C1
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LENGTH: 408 amino acids

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RESULT 49
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US-10-367-094-175
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-367-094-171
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US-10-367-094-171
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: David W. Morris
APPLICANT: Marc Malandro
TITLE OF INVENTION: Novel Therapeutic Targets in Cancer
FILE REFERENCE: 529452001500
CURRENT APPLICATION NUMBER: US/10/367,094
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 203
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 175
LENGTH: 427
TOURS PARTS P
                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: David W. Morris
APPLICANT: Marc Malandro
TITLE OF INVENTION: Novel Therapeutic Targets in Cancer
FILE REFERENCE: 529452001500
CURRENT APPLICATION NUMBER: US/10/367,094
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 203
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 171
                                                                                                                                                                                                                                                     Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 175, Application US/10367094
Publication No. US20040170982A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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Best Local :
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                         382 INPETVPKPCCAPTQLNAIS 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         363 INPETVPKPCCAPTQLNAIS 382
                                                                                                                                                                                                                    20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
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                                                                                                                                                  INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INPETVPKPCCAPTQLNAIS 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INPETVPKPCCAPTQLNAIS
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                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                           100.0%; Score 111; 100.0%; Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 111; DB 15; 100.0%; Pred. No. 1.4e-06;
                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 111; DB 16;
Pred. No. 1.5e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
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thes 0;
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                                                                                                                                                                                                                                                                         Length 427;
                                                                                                                                                                                                                 Indels
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Sequence 2, Application US/08822186
Publication No. US20010014662A1
GENERAL INFORMATION:
APPLICANT: RUEGER, David C.
APPLICANT: TUCKER, Marjorie M.
ITITLE OF INVENTION: IMPROVED OSTE
ITITLE OF INVENTION: OF USE THEREO;
ITITLE OF INVENTION: OSTEOCHONDRAL
UNMBER OF SEQUENCES: 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: VITO, CHRISTINE C
REGISTRATION NUMBER: 39,061
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
TELEPAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                              Sequence 2, Application US/08937755 Publication No. US20020049159A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                        APPLICANT: COHEN, CHARL:
TITLE OF INVENTION: METITLE OF INVENTION: TRE-
TITLE OF SEQUENCES: 9
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                    APPLICANT: RUEGER, DAVID C. APPLICANT: SAMPATH, KUBER T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/822,186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: USA
ZIP: 0.1748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE BIOMOLECULES, INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 45 CONCITY: HOPKINTON
                                                                                                                        ADDRESSEE: PATENT ADMINISTRATOR,
ADDRESSEE: THIBEAULT, LLP
STREET: 125 HIGH STREET
                                                                 COUNTRY:
                                                                                                           CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             386 INPETVPKPCCAPTQLNAIS 405
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                                                  MA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 111; DB 8; Length 431; ilarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein
                                                                                                                                                                                                                               CHARLES M.

METHODS AND COMPOSITIONS FOR THE

TREATMENT OF MOTOR NEURON INJURY AND NEUROPATHY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET
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Marjorie M.

Marjorie M.

IMPROVED OSTEOGENIC DEVICES AND METHODS

OF USE THEREOF FOR REPAIR OF ENDOCHONDRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OSTEOCHONDRAL DEFECTS
                                                                                                                                                                      TESTA, HURWITZ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 111; DB 8; Length 431; Best Local Similarity 100.0%; Pred. No. 1.5e-06; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2, Application US/08957425
Publication No. US20030069401A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: MEYERS, THOMAS C.
REGISTRATION NUMBER: 36,989
REFERENCE/DOCKET NUMBER: CRP-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (617) 248-7100 INFORMATION FOR SEQ ID NO: 3 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/937,755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
CLASSIFICATION: <URKnown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: OPPERMANN, HERMANN
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           386 INPETVPKPCCAPTQLNAIS 405
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              APPLICATION NUMBER: US/08/447,570
FILING DATE: 21-FBB-1992
APPLICATION NUMBER: US 810,560
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 660,162
FILING DATE: 22-FBB-1991
APPLICATION NUMBER: US 6621,988
FILING DATE: 04-DEC-1990
APPLICATION NUMBER: US 621,988
FILING DATE: 04-DEC-1990
APPLICATION NUMBER: US 621,849
FILING DATE: 04-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: MASSACHUSETTS COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: TESTA, HURWITZ & THIBEAULT STREET: 53 STATE STREET
APPLICATION NUMBER: US 616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KUBERASAMPATH, THE RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ROY H.L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CRP-155
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TYPE: amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 2:

US-08-957-425-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-260-675-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17, Applicat Publication No. US200 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 111; DB 8; Best Local Similarity 100.0%; Pred. No. 1.5e-06; Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
              COUNTRY: USA
ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FROM PC COMPATIBLE
COMPUTER: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/260,675
                                                                                                                                                                                                                                                                                                                                             APPLICANT: PANG, ROY HL
APPLICANT: COHEN, CHARLES M
TITLE OF INVENTION: MORPHOO
TITLE OF INVENTION: REPAIR
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA HURWITZ & THIBEAULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                   STREET: 55 ST
CITY: BOSTON
  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 569,920
FILING DATE: 20-AUG-1990
APPLICATION NUMBER: US 483,913
FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 422,613
FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 600,024
FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 599,543
FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 579,865
FILING DATE: 07-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: PITCHER, EDMUND R.
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-001CP6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/08260675
                                                                                                                                                                                                                                                                            55 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                OZKAYNAK, ENGIN
PANG, ROY HL
COHEN, CHARLES M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RUEGER, DAVID C
KUBERASAMPATH, THA
OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                            MORPHOGEN-INDUCED NERVE REGENERATION AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-NOV-1990
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Patent No. US20010016646A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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Best Local
ATTORNEY/AGENT INFORMATION:
NAME: VITO, CHRISTINE C
REGISTRATION NUMBER: 3,061
REFERENCE/DOCKET NUMBER: CRP.
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION
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                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/045,331
FILING DATE:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 07,
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07,
FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: RUEGER, David C.
APPLICANT: TUCKER, Marjorie M.
TITLE OF INVENTION: IMPROVED OSTEOGENIC DEVICES AND METHODS
TITLE OF INVENTION: OF USE THEREOF FOR REPAIR OF ENDOCHONDRAL BONE AND
TITLE OF INVENTION: OSTEOCHONDRAL DEFECTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: CREATIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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PRIOR APPLICATION NUMBER:
                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                          ZIP: 01748
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                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: PITCHER ESQ, EDMUND R REGISTRATION NUMBER: 27,829 REFERENCE/DOCKET NUMBER: CRI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: CREATIVE BIOMOLECULES, INC
45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                              USA
                                                                                                                                             08/822,186
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                                         CRP-137
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US-09-828-607-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2, Application US/09887901 Publication No. US20020091077A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 2
LENGTH: 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 100.0%; Score 111; DB 9; Best Local Similarity 100.0%; Pred. No. 1.5e-06; Matches 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: STRYKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: STRYKER CORPORATION
TITLE OF INVENTION: REPAIR OF LARYNX, TRACHEA; AND OTHER FIBROCARTILAGINOUS
FILE REFERENCE: STK-070 PCT
CURRENT APPLICATION NUMBER: US/09/828,607
CURRENT FILING DATE: 2001-04-06
NUMBER OF SEQ 1D NOS: 9
NUMBER OF SEQ 1D NOS: 9
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2, Application US/09828607 Patent No. US20010024823A1
                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: RUEGER, David C
TUCKER, Marjorie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 431 amino acids TYPE: amino acid TOPOLOGY: linear
                                                                          COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0,

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCE ADDRESS:
CORRESPONDENCE ADDRESS:
ADDRESSEE: James F. Haley,
                                                                                                                                                                                                                                                                                                                                             APPLICANI: NUMBER, MAXJORIE M
TUCKER, MAXJORIE M
TITLE OF INVENTION: MATRIX-FREE OSTEOGENIC DEVICES, IMPLANTS AND
METHODS OF USE THEREOF
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         386 INPETVPKPCCAPTQLNAIS 405
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              APPLICATION NUMBER: US/09/887,901 FILING DATE: 22-Jun-2001 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                           STATE: New York
                                                                                                                                                                                                       ZIP: 10020
                                                                                                                                                                                                                      COUNTRY: United States of America
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 111; DB 9; ilarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                               Jr., Esq.
Americas
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                                                Sequence 2, Application US/09039107
Publication No. US20030032586A1
GENERAL INFORMATION:
APPLICANT: David C. Rueger and Marjorie M. Tucker
TITLE OF INVENTION: COMPOSITIONS FOR MORPHOGEN-INDUCED
TITLE OF INVENTION: OSTEOGENESIS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSES.
                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 20; Conserv
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SEQ ID NO 10
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GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: THEREFOR FILE REFERENCE: CIBT-PO4-543 CURRENT EMPLICATION NUMBER: US/09/982,543A CURRENT FILING DATE: 2001-10-18 PRIOR APPLICATION NUMBER: 08/448,371 PRIOR FILING DATE: 1995-06-02 NUMBER OF SEQ ID NOS: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Dijke, P.
APPLICANT: Miyazano, K.
APPLICANT: Sampath, K.
APPLICANT: Heldin, C.
APPLICANT: Heldin, C.
TITLE OF INVENTION: WORPHOGENIC PROTEIN-SPECIFIC CELL SURFACE RECEPTORS AND USES
TITLE OF INVENTION: THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (212)596-9000
TELEFAX: (212)596-9090
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 431
                                     ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: CRP-147
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                         386 INPETVPKPCCAPTQLNAIS 405
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NEW YORK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 09/019,339 FILING DATE: <Unknown>
                 1250 AVENUE OF THE AMERICAS
                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 111; DB 9; 100.0%; Pred. No. 1.5e-06;
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100.0%; Pred. No. 1.5e-06;
cive 0; Mismatches 0;
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US-09-540-466-2

Sequence 2, Application US/09540466 Publication No. US20030104977A1 GENERAL INFORMATION:

APPLICANT: RIPAMONTI, UGO

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Sequence 1, Application US/09798518

Publication No. US20030049328A1

GENERAL INFORMATION:
APPLICANT: DIMAANO, GODOFREDO R.
APPLICANT: TOTH, CARCH ANN
APPLICANT: TOTH, CARCH ANN
APPLICANT: TOTH, CARCH ANN
APPLICANT: TULKARUI, SHAILESH C.
TITLE OF INVENTION: POROUS BETA-TRICALCIUM PHOSPHATE GRANULES AND METHODS
TITLE OF INVENTION: FOR PRODUCING SAME
FILE REFERENCE: STK-8
CURRENT APPLICATION NUMBER: US/09/798,518
CURRENT FILING DATE: 2001-03-02
NUMBER OF SEQ ID NOS: 9
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1
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                                                                                                                                                                 ; LENGTH: 431
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-798-518-1
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                                                                          Matches
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Best Local
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Best Local Similarity
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CONTRY:
CONTRY:
CONTRY:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
COMPUTER: I M MAT 1998
CLASSIFICATION INFORMATION:
NAME: Z YING LI
REGISTRATION NUMBER: 42,800
REFERENCE/DOCKET NUMBER: 514-068 (CIELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 596-9000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELERHONE: (212) 596-9000
TELERAX: (212) 596-9090
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
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TYPE: amino acid
TOPOLOGY: lino-
WOLECHT
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COUNTRY:
386 INPETVPKPCCAPTQUAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  386 INPETVPKPCCAPTQLNAIS 405
                          1 INPETVPKPCCAPTQLNAIS 20
                                                                              l Similarity
20; Conserv
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                                                                              100.0%; Score 111; DB 10; ilarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; pred. No. - 100.0%; pred. No. - 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STK-068 (CRP-112)
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Pred. No. 1.5e-06;
); Mismatches 0;
                                                                                                                      Length 431;
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US-09-012-846-2
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SEQ ID NO 2
LENGTH: 431
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 20; Conservative 0
                                                                                                                                                                                                                                                                                 Sequence 2, Application US/09012846 Publication No. US20030170213A1 GENERAL INFORMATION:
APPLICANT: MATC F. Charette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/540,466
CURRENT FILING DATE: 2000-03-31
NUMBER OF SEQ ID NOS: 10
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2
SEQ ID NO 2
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENERAL INFORMATION.
APPLICANT: Sampath, Kuber T.
APPLICANT: Cohen, Charles M.
TITLE OF INVENTION: Methods For Tissue Morphogenesis and Methods for
TITLE OF INVENTION: Evaluating Morphogenic Activity
TITLE OF INVENTION: Evaluating For CBM-70 WO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: Seq. Listing For CEM-70 1
CURRENT APPLICATION NUMBER: US/09/423,943
CURRENT FILLING DATE: 2000-03-18
NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: RAMOSHEBI, LENTSHA N.
TITLE OF INVENTION: METHODS FOR INDUCING ANGIOGENESIS USING MORPHOGENIC TITLE OF INVENTION: PROTEINS AND STIMULATORY FACTORS
FILE REFERENCE: STK-6
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                            APPLICANT: Marc F. Charette
APPLICANT: Marc F. Charette
TITLE OF INVENTION: Methods and Compositions for
TITLE OF SEQUENCES: 9
                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Sin
                                                                                                                                                              STREET: 45 SOUTH
                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                         386 INPETVEKECCAPTOLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     386 INPETVPKPCCAPTQLNAIS 405
                                                                                                      01748
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                                                                                                                                                                                 E: CREATIVE BIOMOLECULES, INC
45 SOUTH STREET
                                                                                                                          USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 111; DB 10; 100.0%; Pred. No. 1.5e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 111; DB 10;
Pred. No. 1.5e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 431;
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US-09-952-318A-17
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                                                                                                                                                                          Sequence 17, Application US/09952318A Publication No. US20030224979A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
APPLICANT: Kubersampath et al.

TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS IN

TITLE OF INVENTION: METABOLIC BONE DISEASE
FILE REFERENCE: JUJ-P06-522
CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT FILLING DATE: 2001-09-13
PRIOR APPLICATION NUMBER: 09/170,936
PRIOR FILING DATE: 1998-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application US/09960789
Publication No. US20030180376A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: DALAL, PARESH S.
APPLICANT: DIMAANO, GODOFREDO R.
APPLICANT: TOTH, CAROL ANN
APPLICANT: KULKARNI, SHAILESH C.
TITLE OF INVENTION: POROUS BETA-TRICALCIUM PHOSPHATE GRANULES AND METHODS
TITLE OF INVENTION: FOR PRODUCING SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 2001-03-02
NUMBER OF SEQ ID NOS: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: STK-8 CIP
CURRENT APPLICATION NUMBER: US/09/960,789
CURRENT FILING DATE: 2001-09-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
TELEPAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 09/798,518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Thomas C. Meyers
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                          386 INPETVPKPCCAPTQLNAIS 405
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                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
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Pred. No. 1.5e-06;
                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 431;
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PRIOR APPLICATION NUMBER: 08/432,883
PRIOR FILING DATE: 1995-05-02
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR FILING DATE: 1993-09-01
PRIOR PILING DATE: 1993-09-01
PRIOR PILING DATE: 1992-07-31
PRIOR APPLICATION NUMBER: 07/752,847
PRIOR PILING DATE: 1991-08-30
PRIOR FILING DATE: 1991-03-11
PRIOR PILING DATE: 1991-03-11
NUMBER OF SEQ ID NOS: 33
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US-10-062-370-5
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, MOLECULE TYPE: protein ; SEQUENCE DESCRIPTION: SEQ ID NO: US-10-062-370-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-952-318A-17
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 248-7000
TELEPAX: (617) 248-7100
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
les 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARBE PATEENTIA Release #1.0, Version #1.30
CURRENT APPLICATION DATA: Release #1.0, Version #1.30
APPLICATION NUMBER: US/10/062,370
APPLICATION NUMBER: US/10/062,370
FILING DATS: 01-Feb-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                             PRIOR APPLICATION UMATA:
APPLICATION NUMBER: 08/828,281
FILING DATE: 1997-MAR-21
ATTORNEY/AGENT INFORMATION:
AMME: FENTON, GILLIAN REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-069CP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 01748
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: CHARETTE, Marc F.
FINKLESTEIN, Seth P.
TITLE OF INVENTION: METHODS FOR ENHANGING FUNCTIONAL
RECOVERY FOLLOWING CENTRAL NERVOUS SYSTEM ISCHEMIA OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
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STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: CREATIVE BIOMOLECULES, INC
STREET: 45 SOUTH STREET
                                                                    TOPOLOGY: linear
                                                                                      LENGTH: 431 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 111; DB 10; ilarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatches 0;
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RESULT 66 US-10-122-026-2

Sequence 2, Application US/10122026 Publication No. US20030105004A1

GENERAL INFORMATION: APPLICANT: JONE

: JONES, WILLIAM K
TUCKER, RONALD F
RUEGER, DAVID C
OPPERMANN, HERMANN

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Db
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                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/459,129
FILING DATE: «Unknown»
ATTORNEY/AGENT INFORMATION:

NAME: KELLEY, ROBIN D.

REGISTRATION NUMBER: 34,637
REFERENCE/DOCKET NUMBER: CRP-101
REFERENCE/DOCKET NUMBER: CRP-101
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7100
TELEPHONE: 617/248-7100
TELEPAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
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Best Local (
                                                                       Matches
                                                                                        Query Match
Best Local Similarity
                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/083,825
FILING DATE: 27-Peb-2002
CLASSIFICATION: CUnknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ
STREET: 53 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: MANUFACTURE OF AUTOGENOUS REPLACEMENT BODY PARTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: KHOURI, ROGER K. SAMPATH, KUBER T. RUEGER, DAVID C.
                                                                                                                                                          TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          386 INPETVPKPCCAPTQLNAIS 405
 386 INPETVPKPCCAPTQLNAIS 405
                            1 INPETVPKFCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 INPETVPKPCCAPTQLNAIS
                                                                       20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: MASSACHUSETTS COUNTRY: U.S.A.
                                                                                                                                                                                                               LENGTH: 431 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; ilarity 100.0%; Conservative 0;
                                                                     100.0%; Score 111; DB 14; ilarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatches 0;
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Pred. No. 1.5e-06;
Nismatches 0;
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                                                                                                         Length 431;
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RESULT 67
US-10-272-503-2
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                                                         Sequence 2, Application US/10272503 Publication No. US20030109445A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: CAMACHO, JENNIFER A.
REGISTRATION NUMBER: 43,526
REFERENCE/DOCKET NUMBER: STK-060CN
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
OF MATTER
                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-MAR-1991
ATTORNEY/AGENT INFORMATION:
                     APPLICANT: RUEGER, DAVID C. SAMPATH, KUBER T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                   386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                20;
                                                                                                                                                                                                                                       1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 31-JUL-1992
APPLICATION NUMBER: US 07/752,857
FILING DATE: 30-AUG-1991
FILING DATE: 30-AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/10/122,026
FILING DATE: 29-Aug-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SPONDENCE ADDRESS:
ADDRESSEE: Patent Administrator, Testa, Hurwitz &
Thibeault, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/946,235 FILING DATE: 16-SEP-1992 APPLICATION NUMBER: US 07/938,336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 08/840,510
FILING DATE: 31-WAR-1993
APPLICATION NUMBER: US 08/029,335
FILING DATE: 04-WAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/971,091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 08/402,542 FILING DATE: 13-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 07/923,780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LING DATE: 28-AUG-1992
                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                 100.0%;
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                                                                                                                                                                                                                                                                                0;
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Pred. No. 1.5e-06;
                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                        DB 14;
                                                                                                                                                                                                                                                                                                                      Length 431;
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                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 68
US-10-050-050-17
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                              Sequence 17, Applicati
Publication No. US2003
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (617) 248-7: INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/938,622
FILING DATE: <UNKNOWN>
ATTORNEY/AGENT INFORMATION:
NAME: MEYERS, THOWAS C.
REGISTRATION NUMBER: 36,989
REFERENCE/DOCKET NUMBER: CRP-128
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Ve
CURRENT APPLICATION NUMBER: US/10/272,503
FILING DATE: 16-Oct-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PANG, ROY H.L.
COHEN, CHARLES M.
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR THE
TREATMENT AND PREVENTION OF PARKINSON'S DISEASE
                                                                                                                                                           TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELLS
                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, TESTA, HURWITZ &
THIBBAULT, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         386 INPETVPKPCCAPTQLNAIS 405
CITY: HOPKINTON
STATE: MA
COUNTRY: USA
ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 125 HIGH STREET CITY: BOSTON
                                                                              ADDRESSEE: PATENT ADMIN
STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 431 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 02110
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                                                                                                                                                                                                                                                                                                                                                                                  Application US/10050050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 111; DB 14; llarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatches 0;
                                                                                                                                                                                               CHARLES M.
CHARETTE, MARC F.
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
OPPERVANN, HERMANN
PANG, ROY H.L.
OZKAYNAK, ENGIN
SMART, JOHN E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NE: (617)
: (617) 2:
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                                                                                                   ADMINISTRATOR, CREATIVE BIOMOLECULES
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MEDIUM TYPE: Floppy disk

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TITLE OF INVENTION: Bone Morphogenic Proteins (BMP), BMP Receptors and BMP Binding PT TITLE OF INVENTION: and Their Use in the Diagnosis and Treatment of Glaucoma FILE REFERENCE: 2312 US CURRENT APPLICATION NUMBER: US/10/286,152A CURRENT FILING DATE: 202-02-28 NUMBER OF SEQ ID NOS: 54 SOFTWARE: PATENTIN Version 3.1 SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 431;
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PRIOR FILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/361,978
PRIOR APPLICATION NUMBER: US 60/381,988
PRIOR FILING DATE: 2002-05-20
NUMBER OF SEQ ID NOS: 228
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 10
LENGTH: 431
                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn version 3.2
SEQ ID NO 39
LENGTH: 431
TYPE: PRT
RCANISM: Homo sapiens
US-10-366-345-39
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-301-822-10
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 39, Application US/10366345
Publication No. US20030224501A1
GENERAL INFORMATION:
APPLICANT: Young, et al.
TITLE OF INVENTION: Bone Morphogenetic Protein Polynucleotides, Polypeptides
TITLE OF INVENTION: Antibodies
FILE REFERENCE: PT189
                                                         Sequence 2, Application US/10321799
Publication No. US20030224996A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 111; Best Local Similarity 100.0%; Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/366,345
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: BUTGATT, LAWTENCE J.
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND
TITLE OF INVENTION: METHODS FOR IDENTIFICATION, ASSESSMENT,
TITLE OF INVENTION: THERAPY OF COLON CANCER
FILE REFERENCE: MPMO1-029PZRNM
CURRENT APPLICATION NUMBER: US/10/301,822
CURRENT FILING DATE: 2002-11-21
CURRENT FILING DATE: 2002-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Millennium Pharmaceuticals, Inc. APPLICANT: Berger, Allison
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
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                                        APPLICANT:
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                                                                                                                                                                                                  386 INPETVPKPCCAPTQLNAIS
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Monahan, John E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/10366345
vo. US20030224501A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kamatkar, Shubhangi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Thibodeau, Stephen N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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OPPERMANN, HERMANN
OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
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100.0%; Pred. No. 1
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. 1.5e-06;
ches 0;
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                                                                                                                                                                                                                                                                                                                       DB 14;
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386 INPETVPKPCCAPTQLNAIS 405

INPETVPKPCCAPTQLNAIS 20

US-10-050-050-17

TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 17:

SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid

TELEPHONE: (508) 435-6
TELEFAX: (508) 435-6
INFORMATION FOR SEQ ID NO: 17:

435-6951 435-9001

NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
TELECOMMUNICATION INFORMATION:

APPLICATION NUMBER: US/10/050,050
FILING DATE: 15-Jan-2002
CLASSIFICATION: <UNKnown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/461,113
FILING DATE: <UNKnown>
APPLICATION NUMBER: US 08/445,882
FILING DATE: 22-MAY-1995
ATTORNBY/AGENT INFORMATION:

Matches Best Local Query Match

Similarity

100.0%; Score 111; DB 14; llarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatches 0;

US-10-286-152A-8 RESULT 69

Sequence 8, Application US/10286152A Publication No. US20030134308A1 GENERAL INFORMATION:

APPLICANT: Alcon Research, Ltd. APPLICANT: Clark, Abbot F.

RESULT 70 US-10-301-822-10 / Sequence 10, Application US/10301822 / Publication No. US20030148410A1

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386

INPETVEKECCAPTOLNAIS 405

1 INPETVPKPCCAPTQLNAIS 20

; LENGTH: 431 ; TYPE: PRT ; ORGANISM: homo sapiens US-10-286-152A-8

Query Match Best Local (

Similarity

100.0%; Score 111; DB 14; ilarity 100.0%; Pred. No. 1.5e-06; Conservative 0; Mismatches 0;

TITLE O

431;

0

Gaps

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INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                            APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
ATTORNEY/AGENT INFORMATION:
                                                                             REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: STK-001CP6C3
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/321,799
FILING DATE: 17-Dec-2002
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET
                                       TELEPHONE: 617/248-7000
TELEFAX: 617/248-7100
                                                                                                                                             NAME: DIANA M.
                                                                                                                                                                                                                                                    FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 07/841,646
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                   FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/422,699
                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 07/579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 07/621,988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 07/621,849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 24-MAY-1995
APPLICATION NUMBER: US 08/147,023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OF INVENTION: OSTEOGENIC DEVICES OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PPLICATION NUMBER: US 07/569,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PPLICATION NUMBER: US 07/810,560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PPLICATION NUMBER: US 07/599,543
                                                                                                                                                                                                                                                                                                                                                            ING DATE: 23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ING DATE:
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CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                     CATION NUMBER: US
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APPLICANT: WATEGON, SUSAN R.
APPLICANT: EOS BÍOTECHNOLOGY, Inc.
APPLICANT: EOS BÍOTECHNOLOGY, Inc.
ITITLE OF INVENTION: Methods of Diagnosis of Cancer, Compositi
TITLE OF INVENTION: Methods of Screening for Modulators of (
FILE REFERENCE: 018501-012500US
CURRENT APPLICATION NUMBER: US/10/295,027
CURRENT FILING DATE: 2002-11-13
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 60/335,394
PRIOR APPLICATION NUMBER: US 60/335,394
PRIOR APPLICATION NUMBER: US 60/332,464
PRIOR FILING DATE: 2001-11-21
PRIOR APPLICATION NUMBER: US 60/332,464
PRIOR FILING DATE: 2001-11-21
PRIOR APPLICATION NUMBER: US 60/337,393
PRIOR APPLICATION NUMBER: US 60/337,393
PRIOR APPLICATION NUMBER: US 60/337,393
PRIOR APPLICATION NUMBER: US 60/340,376
PRIOR APPLICATION NUMBER: US 60/347,211
PRIOR APPLICATION NUMBER: US 60/347,211
PRIOR APPLICATION NUMBER: US 60/347,211
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US-10-295-027-518
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                                                                                                                                                                                                                                                    SEQ ID NO 518
LENGTH: 431
                                                                                                         Matches
                                                                                                                             Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 2002-02-13
                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 60/355,250
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APPLICATION NUMBER: US 60/347,349
FILING DATE: 2002-01-10
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APPLICATION NUMBER: US 60/356,714
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TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
                          386
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                                                                                                                           Similarity
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                        INPETVPKPCCAPTQLNAIS 405
                                                           INPETVPKPCCAPTQLNAIS 20
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Hevezi, Peter A
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b. US20030232350A1
                                                                                                     100.0%; ilarity 100.0%; Conservative
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Pred. No. 1.5e-06;
                                                                                                     Score 111; DB 14;
Pred. No. 1.5e-06;
, Mismatches 0;
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                                                                                                                                             Length 431;
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SEQUENCE

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Gaps

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APPLICANT: MULTRAY, Richard
APPLICANT: Watson, Susan R.
APPLICANT: Watson, Susan R.
APPLICANT: Watson, Susan R.
APPLICANT: Bos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Cancer, Control of Invention: Methods of Screening for Modulato:
TITLE REFERENCE: 018501-012500US
FILE REFERENCE: 018501-012500US
FURRENT APPLICATION NUMBER: US/10/295,027
CURRENT FILING DATE: 2002-11-13
PRIOR APPLICATION NUMBER: US 09/663,733
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR APPLICATION NUMBER: US 60/350,394
PRIOR APPLICATION NUMBER: US 60/335,394
PRIOR APPLICATION NUMBER: US 60/335,394
PRIOR APPLICATION NUMBER: US 60/335,394
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US-10-295-027-806
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SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 787
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Best Local
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Publication No. US20030232350A1
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APPLICANT: Aziz, Natas
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ORGANISM: Homo sapiens
                                                                                          APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
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APPLICATION NUMBER: US 60/334,393
FILING DATE: 2001-11-29
APPLICATION NUMBER: US 60/340,376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 2002-01-08
APPLICATION NUMBER: US 60/347,349
FILING DATE: 2002-01-10
APPLICATION NUMBER: US 60/355,250
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APPLICATION NUMBER: US 60/347,211
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APPLICATION NUMBER: US 60/356,714
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           h 100.0%; Score 111; DB 14;
Similarity 100.0%; Pred. No. 1.5e-06;
20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                          INPETVPKPCCAPTQLNAIS 20
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Hevezi, Peter A.
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                                                                Glynne, Richard
Hevezi, Peter A.
Mack, David H.
Murray, Richard
Watson, Susan R.
Eos Biotechnology,
                                                                                                                               Ginsberg, Wendy M. Gish, Kurt C.
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b. US20030232350A1
                                                                                                                                                                                                  Daniel
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      Inc
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-295-027-806
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                                                                CURRENT APPLICATION NUMBER: US 09/663,733
PRIOR APPLICATION NUMBER: US 09/663,733
PRIOR ELLING DATE: 2000-09-15
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR APPLICATION NUMBER: US 60/350,666
PRIOR FILING DATE: 2001-11-13
PRIOR PELICATION NUMBER: US 60/335,394
PRIOR APPLICATION NUMBER: US 60/335,394
PRIOR APPLICATION NUMBER: US 60/332,464
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Publication No.
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Best Local
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APPLICANT:
APPLICANT:
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APPLICANT: Watson, Susan R.
APPLICANT: Eos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of
TITLE OF INVENTION: Methods of Screening fo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Afar, Daniel APPLICANT: Aziz, Natas
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PRIOR APPLICATION NUMBER: US 60/356,714
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PRIOR APPLICATION NUMBER: US 60/335,394
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                                                                                                                                                                                                                                                                      FILE REFERENCE: 018501-012500US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 2001-11-15
APPLICATION NUMBER: US 60/332,464
FILING DATE: 2001-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 60/340,376
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APPLICATION NUMBER: US 60/334,393
FILING DATE: 2001-11-29
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                                APPLICATION NUMBER: US 60/334,393
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION:
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l Similarity 100.0%;
20; Conservative 0,
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Hevezi, Peter A.
Mack, David H.
Murray, Richard
Watson, Susan R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ginsberg, Wendy M.
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o. US20030232350A1
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Pred. No. 1
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                                                                                                                                                                                                                                                                                               of Cancer, Compositions and for Modulators of Cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   See File Wrapper
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 Query Match
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 843
                                                                                                                                       TELEFAX: 617-876-5851
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 2002-01-08
PRIOR APPLICATION NUMBER: US 60/347,349
PRIOR FILING DATE: 2002-01-10
PRIOR APPLICATION NUMBER: US 60/355,250
PRIOR FILING DATE: 2002-02-08
PRIOR APPLICATION NUMBER: US 60/356,714
PRIOR FILING DATE: 2002-02-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Remaining Prior Application data removed NUMBER OF SEQ ID NOS: 1386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          quence 6, Application US/10375150 No. US20030235888A1
                                                                                                                                                                             NAME: Kapinos, Ellen J.
REGISTRATION NUMBER: 32,245
REFERENCE/DOCKET NUMBER: GI-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-876-1170
                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Tape
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/375,150
                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                     MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Israel, David
APPLICANT: Wolfman, Neil M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     UMBER OF SEQUENCES:
                                                                                         TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TLE OF INVENTION:
                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
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                                                                                                          ENGTH
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87 CambridgePark Drive
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100.0%;
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 Score 111;
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Pred. No. 1.5e-06;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      See File Wrapper or PALM.
 DB 14;
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US-10-173-999-58
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PRIOR FILING DATE: 2001-09-26

PRIOR APPLICATION NUMBER: 09/544511

PRIOR HILING DATE: 2000-04-06

PRIOR APPLICATION NUMBER: 60/128514

PRIOR FILING DATE: 1999-04-09

PRIOR APPLICATION NUMBER: 09/569269
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SEQ ID NO 58
LENGTH: 431
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Publication No. US20040067505A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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Best Local s
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APPLICANT: Mack, Daviu ...

APPLICANT: Gish, Kurt C.

APPLICANT: Eos Biotechnology, Inc.

APPLICANT: Eos Biotechnology, Inc.

APPLICANT: More and Methods of Screening for Mc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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                                                                           PRIOR FILING DATE: 1999-05-14
PRIOR APPLICATION NUMBER: 09/619252
PRIOR FILING DATE: 2000-07-19
PRIOR APPLICATION NUMBER: 09/789390
                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: 21402-585
CURRENT APPLICATION NUMBER: US/10/428,275
CURRENT FILING DATE: 2003-05-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-428-275-6
                                                                                                                                                               PRIOR FILING DATE: 2000-05-11
PRIOR APPLICATION NUMBER: 60/134315
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PRIOR FILING DATE: 2001-06-18
PRIOR APPLICATION NUMBER: US 60/315,287
PRIOR FILING DATE: 2001-08-27
PRIOR PPLICATION NUMBER: US 60/350,666
PRIOR PILING DATE: 2001-11-13
PRIOR PPLICATION NUMBER: US 60/372,246
PRIOR APPLICATION NUMBER: US 60/372,246
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NUMBER OF SEQ ID NOS: 163
                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHODS
                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Alvarez et al
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: 018501-002420US
CURRENT APPLICATION NUMBER: US/10/173,999
CURRENT FILING DATE: 2002-06-17
FILING DATE: 2001-02-25
APPLICATION NUMBER: 60/185548
TTING DATE: 2000-02-25
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ilarity 100.0%;
Conservative (
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Pred. No. 1.5e-06;
); Mismatches 0;
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); Mismatches 0;
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RESULT 80
US-10-428-997A-2
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SOFTWARE: CuraSeqList version 0.1
SEQ ID NO 6
LENGTH: 431
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Publication No. US20040077546A1 
GENERAL INFORMATION:
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Patentin Release #1.0, volume Transplication DATA:
APPLICATION NUMBER: US/10/428,997A
FILING DATE: 02-May-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: OPPERMANN, HERMANN
OZKAYNAK, ENGIN
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                                                                                                                                             APPLICATION NUMBER: US 07/621,849
FILING DATE: 4-DEC-1990
APPLICATION UNBER: US 07/621,988
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/810,560
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-ANG-1990
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-ANG-1990
                         FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/599,543
FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/616,374
FILING DATE: 21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 07/841,646
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 08/957,425
FILING DATE: 24-OCT-1997
APPLICATION NUMBER: US 08/447,570
FILING DATE: 23-WAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: TESTA, HURWITZ & THIBEAULT STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                  FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 07/579,865
FILING DATE: 7-SEP-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 08/147,023 FILING DATE: 1-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: U.S.A.
    APPLICATION NUMBER: US 07/483,913
                                                                                                                             APPLICATION NUMBER: US 07/600,024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 111; DB 15; 100.0%; Pred. No. 1.5e-06;
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; Sequence 1, Application US/10290554 ; Publication No. US20040093164A1 .; GENERAL INFORMATION:
                                                                US-10-290-554-1
                                                                                      RESULT 82
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; LENGTH: 431 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO:
US-10-428-997A-2
                                                                                                                                                                                            ; ORGANISM: Homo sapiens US-10-302-812-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 81
US-10-302-812-28
                                                                                                                                                                                                                                                                                                                                  Sequence 28, Application US/10302812

Publication No. US20040087016A1

GENERAL INFORMATION:

APPLICANT: Keating et al.

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR CELL DEDIFFERENTIATION AND TITLE OF INVENTION: TISSUE REGENERATION

FILE REFERENCE: HYDR-P02-004

CURRENT APPLICATION NUMBER: US/10/302,812

CURRENT APPLICATION NUMBER: 002-11-21

NUMBER OF SEQ ID NOS: 78

NUMBER OF SEQ ID NOS: 78
                                                                                                                                                                                                                                                              SOFTWARE: PatentIn version 3.1
SEQ ID NO 28
LENGTH: 431
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Matches
                                                                                                                   Query Match
Best Local Similarity
                                                                                                 Matches
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                                                                                                                                                                                                                                              TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 08-APR-1988
APPLICATION NUMBER: US 07/232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 07/315,342
FILING DATE: 23-FEB-1989
APPLICATION NUMBER: US 07/660,162
FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 07/422,699
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
ATTORNEY/AGENT INFORMATION: 48.645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 48,645
REFERENCE/DOCKET NUMBER: STI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEFAX: 617/248-7100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
386 INPETVPKPCCAPTQLNAIS 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       386 INPETVPKPCCAPTQLNAIS 405
                               1 INPETVPKPCCAPTQLNAIS 20
                                                                                           ch 100.0%; 1 Similarity 100.0%; 20; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 07/179,406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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                                                                                           Score 111; DB 15;
Pred. No. 1.5e-06;
D: Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 111; DB 15;
Pred. No. 1.5e-06;
                                                                                                                                           Length 431;
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                                                                                           Gaps
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FILE REFERENCE: STK-4

CURRENT APPLICATION NUMBER: US/10/753,916

CURRENT FILING DATE: 2004-01-07

PRIOR APPLICATION NUMBER: US/09/672,224A

PRIOR FILING DATE: 2000-09-27

PRIOR APPLICATION NUMBER: 60/156,261

PRIOR FILING DATE: 1999-09-27

NUMBER OF SEQ ID NOS: 14

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 2
                                                                                                                                                                                                                                                         RESULT 84
US-09-361-741-3
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-753-916-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 83
US-10-753-916-2
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                                                                                                                                                                                                                     Sequence 3, Application US/09361741 Patent No. US20020048784A1
                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application US/10753916 Publication No. US20040138128A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 1
                                                                                                                                                                                                    GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: YEH, LEE-CHUAN C.
TITLE OF INVENTION: COMPOSITIONS AND THERAPEUTIC METHODS USING MORPHOGENIC
TITLE OF INVENTION: PROTEINS, HORMONES AND HORMONE RECEPTORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: LEE, JOHN C. APPLICANT: YEH, LEE-CH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/290,554
CURRENT FILING DATE: 2002-11-08
NUMBER OF SEQ ID NOS: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Carlson, William D
APPLICANT: Keck, Peter C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Homo sapiens
                                                                                   APPLICANT: HB, WEI WU
TITLE OF INVENTION: PROSTATIC GROWTH FACTOR
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ITLE OF INVENTION: COMPUTER SYSTEM AND METHODS FOR PRODUCING MORPHOGEN ITLE OF INVENTION: ANALOGS OF HUMAN TDF-1
ILE REFERENCE: 24661-501
                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ENGTH: 431
STREET: C. __
                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 100.
les 20; Conservative
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l Similarity 100.0%; P
20; Conservative 0;
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                               E: CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI
E: STEWART & OLSTEIN
6 BECKER FARM ROAD
                                                                                                                                                            HUDSON, PETER L
ROSEN, CRAIG A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
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Pred. No. 1.5e-06;
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Pred. No. 1.5e-06;
); Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 431;
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APPLICANT: HUGGON, et al.

APPLICANT: HUGGON, et al.

ITITLE OF INVENTION: Prostatic Growth Factor

FILE REFERENCE: PF149D2

CURRENT APPLICATION NUMBER: US/10/270,377

CURRENT FILING DATE: 2002-10-15

PRIOR APPLICATION NUMBER: 09/361,741

PRIOR FILING DATE: 1999-07-26

PRIOR APPLICATION NUMBER: 09/461,418

PRIOR APPLICATION NUMBER: 09/461,418

PRIOR APPLICATION NUMBER: 08/411,607

PRIOR FILING DATE: 1995-11-18

PRIOR APPLICATION NUMBER: US94/14578

PRIOR APPLICATION NUMBER: US94/14578

PRIOR FILING DATE: 1994-12-15

NUMBER OF 580 ID NOS: 10

SOFTWARE: Patentin version 3.1

SEQ ID NO 3

LENGTH: 432

TYPER: PRT
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                                                                                                                                                           ; TYPE: PRT ; ORGANISM: Homo sapiens US-10-270-377-3
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US-10-270-377-3
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                                                                        Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 3, Application US/10270377 Publication No. US20030059431A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: (201)994-1700
TELEFAX: (201) 994-1744
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 432 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: FERRARO, GREGORY D
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 32
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/361,741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     / Match 100.0%; Score 111; DB 9; Local Similarity 100.0%; Pred. No. 1.5e-06; Pres 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        387 INPETVPKPCCAPTQLNAIS 406
387 INPETVEKECCAPTQUNAIS 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07068
                                      INPETVPKPCCAPTOLNAIS 20
                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               : (201)994-1700
(201)994-1744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SS: single
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Floppy disk
                                                                                               100.0%; Score 111; 100.0%; Pred. No. 1
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                                                                              Mismatches
                                                                                                 1.5e-06
                                                                                                                    DB 14;
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08-957-425-13

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Sequence 13, Applicati
Publication No. US2003
GENERAL INFORMATION:
TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 484 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 0210;
COMPUTER READABLE FORM:
MENTUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
                                                                                  TELEPHONE: 617/248-7000
                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/447,570 FILING DATE: 21-FEB-1992 APPLICATION NUMBER: US 810,560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET:
                                                                                                                                             NAME: PITCHER, EDMUND R. REGISTRATION NUMBER: 27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/08957425
vo. US20030069401A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: TESTA, HURWITZ & THIBEAULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 621,988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 827,052
FILING DATE: 28-JAN-1992
                                                                                                                         REFERENCE/DOCKET NUMBER: CRP-001CP6
                                                                                                                                                                                                                    APPLICATION NUMBER: US 179,460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PPLICATION NUMBER: US 600,024
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                                                                                                                                                                                                                                                                                                                                                                                                                                PPLICATION NUMBER: US 569,920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PPLICATION NUMBER: US 579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PPLICATION NUMBER: US 599,543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ELIG DATE: 28-JAN-1392
PELICATION NUMBER: US 660,162
TIMO DATE: 22-FEB-191
FOR COLUMBER: 22-FEB-191
                                                                                                                                                                                                                                              PLICATION NUMBER:
LING DATE: 15-AUG
                                                                                                                                                                                                                                                                                       LING DATE:
                                                                                                                                                                                                                                                                                                                                                                                         PLICATION NUMBER:
                                                                                                                                                                                                                                                                                                         LING DATE: 17-OCT-1989
PLICATION NUMBER: US 315,342
                                                                                                                                                                                                                                                                                                                                                                        ING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JING DATE: 21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INVENTION: OSTEOGENIC DEVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KUBERASAMPATH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ROY H.L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ENGIN
                                                                                                                                                                                                                                                                                                                                                  US 422,613
                                                                                                                                                                                                                                                                                                                                                                                         US 483,913
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                                                                                                                                                                                                                                                                  US 232,630
                                                                                                                                          27,829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        621,849
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
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                                                                                           APPLICATION NUMBER: US 07/616,374
                                                                                                                                APPLICATION NUMBER: US 07/600,024 FILING DATE: 18-OCT-1990 APPLICATION NUMBER: US 07/599,543
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PRIOR

MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO: 13: US-08-957-425-13 1 INPETVEKECCAPTOLNAIS 20 Similarity 100.0%; ilarity 100.0%; Conservative 0 Score 111; DB 8; Pred. No. 1.6e-06; Mismatches 0; Length 484; 0

0

Application US/10321799 US20030224996A1

CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET APPLICANT: OPPERMANN, HERMANN OZKAYNAK, ENGIN NUMBER OF SEQUENCES: TITLE OF INVENTION: OSTEOGENIC DEVICES KUBERASAMPATH, TI RUEGER, DAVID C. ROY H. THANGAVEL

COMPUTER READABLE FORM:
MEDIUM TYPE: Floopy disk
COMPUTER: IRM PC compatible
COMPUTER: FOR PC COMPATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS COUNTRY: U.S.A. STATE: MASSACHUSETTS PatentIn Release #1.0, Version #1

CURRENT APPLICATION NUMBER: US/10/321,799
APPLICATION NUMBER: US/10/321,799 CLASSIFICATION: <Unknown> FILING DATE: 17-Dec-2002

PRIOR APPLICATION DATA APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
APPLICATION NUMBER: US 08/147,023
APPLICATION NUMBER: US 08/147,023
APPLICATION NUMBER: US 07/841,646
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052 FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-AUG-1990 APPLICATION NUMBER: US 07/621,988 TLING DATE: 28-JAN-1992
PPLICATION NUMBER: US 07/579,865
TLING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849 PPLICATION NUMBER: US 07/810,560 ILING DATE: 20-DEC-1991

07/600,024

07/179,406

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RESULT 88
US-10-428-997A-13
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Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 13, Application US/10428997A Publication No. US20040077546A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: DIANA M. STEEL
REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: STK-001CP6C3
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7100
INFORMATION FOR SEQ ID NO: 13:
                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                    CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
                                                                                                                                                                                                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/428,997A
FILING DATE: 02-May-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: OPPERVANN, HERMANN
OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 17-OCT-19
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 INPETVPKPCCAPTOLNAIS 20
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FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 07/315,342
FILING DATE: 23-FEB-1989
APPLICATION NUMBER: US 07/660,162
FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 07/422,699
FILING DATE: 17-CCT-1389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                       APPLICATION NUMBER: US 08/957,425
FILING DATE: 24-OCT-1997
APPLICATION NUMBER: US 08/447,570
FILING DATE: 23-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: MASSACHUSETTS COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
                                                  APPLICATION NUMBER: US 08/147,023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-CCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-CCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 111; DB 14; llarity 100.0%; Pred. No. 1.6e-06; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                   02110
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       1-NOV-1993
WWBER: US 07/841,646
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                                                                                                                                                                                                        Sequence 6, Application US/08260675 Publication No. US20030104993A1
                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
GENERAL INFORMATION: RUEGER, DAVID C
APPLICANT: KUBERASAMPATH, THANGAVEL
APPLICANT: OPPERMANN, HERMANN
APPLICANT: OPERMANN, ENGIN
APPLICANT: OZKAYNAK, ENGIN
APPLICANT: PANG, ROY HL
APPLICANT: COHEN, CHARLES M
TITLE OF INVENTION: MORPHOGEN-INDUCED NERVE REGENERATION AND
TITLE OF INVENTION: REPAIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 48,645
REFERENCE/DOCKET NUMBER: STK-015C1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/422,623 FILING DATE: 17-OCT-1989 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                              439 INPETVPKPCCAPTQLNAIS 458
                                                                                                                                                                                                                                                                                                                                                                                       1 INPETVPKPCCAPTOLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                  ch 100.0%; Score 111; DB 15; Similarity 100.0%; Pred. No. 1.6e-06; 20; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
FILING DATE: 28-7AN-1992
APPLICATION NUMBER: US 07/579,865
FILING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 484 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 07/422,699
FILING DATE: 17-0CT-1989
APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-0CT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: BRIAN FAIRCHILD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/810,560
FTI-ING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 08-APR-1988
APPLICATION NUMBER: US 07/232,630
FILING DATE: 15-AUG-1988
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FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/616,374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 20-AUG-1990
APPLICATION NUMBER: US 07/600,024
FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PLING DATE: 23-FEB-1989
APPLICATION NUMBER: US 07/660,162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 07/569,920
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PPLICATION NUMBER: US 07/179,406
ILING DATE: 08-APR-1988
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ILING DATE: 22-FEB-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 484;
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                                                                                                                          Sequence 6, Application US/09952318A Publication No. US20030224979A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local :
APPLICANT: Kubersampath et al.
TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS IN
TITLE OF INVENTION: METHADOLIC BONE DISEASE
FILE REFERENCE: JJU-P06-522
CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT FILING DATE: 2001-09-13
PRIOR APPLICATION NUMBER: 09/170,936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 07/667,274
APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 07/752,764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
LENGTH: 139 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: protein ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA HUNWITZ & THIBEAULT
STREET: 55 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 55 ST
CITY: BOSTON
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: Protein
LOCATION: 1..139
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: 1i:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE TYPE: EMBRYO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                        19;
                                                                                                                                                                                                                                                               94 INPDIVEKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                    1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                                                                          97.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                     /label= MOP1-MATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US/08/126,100
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                                                                                                                                                                                                                                                                                                                                        1; Mismatches
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                                                                                                                                                                                                                                                                                                                                                        Score 108; DB 8; Length 139; Pred. No. 1.2e-06;
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PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: 08/432,883
PRIOR FILING DATE: 1995-05-02
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR APPLICATION NUMBER: 07/923,780
PRIOR PILING DATE: 1992-07-31
PRIOR PILING DATE: 1992-07-31
PRIOR PILING DATE: 1992-07-31
PRIOR PILING DATE: 1991-08-30
PRIOR PILING DATE: 1991-03-11
PRIOR PILING DATE: 1991-03-11
NUMBER: 07/667,274
PRIOR FILING DATE: 1991-03-11
NUMBER: 07 SEQ ID NOS: 33
SOFTWARE: Patentin version 3.1
SEQ ID NO 6
SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 91
US-10-050-050-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: PRT
; ORGANISM: Mus musculus
US-09-952-318A-6
PRIOR APPLICATION NUMBER: US/08/461,113
APPLICATION NUMBER: US/08/461,113
FILING DATE: CUPKDOWN'S
APPLICATION NUMBER: US 08/445,882
FILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:
NAME: FENTON Esq., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
TELEPHONE: (508) 435-9001
TELEPHONE: (508) 435-9001
TELEPHONE: S90) 435-9001
TELEPHONE: S90) 435-9551
INFORMATION FOR SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 6, Application US/10050050 Publication No. US20030125230A1 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                  ZIP: 01748

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTMARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/10/050,050
FILING DATE: 15-Jan-2002
CLASSIFICATION: CUnknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: COHEN, CHARLES M.
CHARETTE, MARC F.
CHARETTE, MARC F.
CHBERKSAMPACH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94 INPUTVEKECCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PANG, ROY H.L.
OZKAYNAK, ENGIN
SMART, JOHN E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 108; DB 10;
Pred. No. 1.2e-06;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 139;
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RESULT 93
US-08-957-425-25
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US-10-385-064-6
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                                                                                                                                                                                         Sequence 25, Applicati
Publication No. US2003
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 6
LENGTH: 139
TYPE: PRT
ORGANISM: Murinae gen. sp.
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 6, Application US/10385064 Publication No. US20040102373A1 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US/09/464,206
PRIOR FILING DATE: 1999-12-15
PRIOR APPLICATION NUMBER: 08/396,684
PRIOR FILING DATE: 1995-03-01
NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: CBM-2 DIV (00960-502 DI CURRENT APPLICATION NUMBER: US/10/385,064 CURRENT FILING DATE: 2003-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Cohen, Charles M. APPLICANT: Kuberasampath, T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Kuberasampath, Thangavel
APPLICANT: Kuberasampath, Thangavel
APPLICANT: Oppermann, Hermann
APPLICANT: Rueger, David C.

TITLE OF INVENTION: Protein Induced Morphogenesis

OF INVENTION: ORM. 2 DIV (00960-502 DIV)
   CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 53 STATE STREET
                                                            PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                 APPLICANT: OPPERMANN, HERMANN
OZKAYNAK, SNGIN
KUBERASAMPATH, THAN
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: Protein
LOCATION: 1.139
OTHER INFORMATION: /note= "MOP-1 (MATURE FORM)"
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
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                                                                                                                                                                                                                                                                                                                     94 INPDTVPKPCCAPTQLNAIS 113
                                                                                                                                                                                                                                                                                                                                                          1 INPETVPKPCCAPTOLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                 l Similarity
19; Conserv
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                                                                                                                                                                                                             Application US/08957425
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TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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95.08;
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                                                                                                                                                                                                                                                                                                                                                                                                                 Score 108; DB 16;
Pred. No. 1.2e-06;
                                                                                                                                     THANGAVEL
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RESULT 94
US-08-260-675-19
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TYPE: amino acids
i TOPOLOGY: linear
i MOLECULE TYPE: protein
sequence Description: Seq ID NO:
US-08-957-425-25
                                                                              Query Match
Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                            TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 25: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 2:
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 1'
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: CRP-001CP6
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
operating system: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/957,425
FILING DATE: 24-Oct-1997
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: U.S.A.
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
385 INPDTVPKPCCAPTQLNAIS 404
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                        INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: PITCHER, EDMUND R. REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/447,570 FILING DATE: 21-FEB-1992 APPLICATION NUMBER: US 810,560 FILING DATE: 20-DEC-1991 APPLICATION NUMBER: US 827,052 FILING DATE: 28-JAN-1992
                                                                                                                                                                                                                                                                        ENGTH: 430 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 315,342
FILING DATE: 23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITING DATE: 18-OUT-12-C

PPLICATION NUMBER: US 579,865

TOTAL DATE: 07-SEP-1990

TO 569,920
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STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 22-FEB-1990
APPLICATION NUMBER: US 422,613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 569,920
FILING DATE: 20-AUG-1990
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APPLICATION NUMBER: US 621,849
APPLICATION NUMBER: US 621,849
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ILING DATE: 04-DEC-1990
PPLICATION NUMBER: US 616,374
ILING DATE: 21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PPLICATION NUMBER: US 600,024 ILING DATE: 18-OCT-1990
                                                                              97.3%;
ilarity 95.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LING DATE: 17-OCT-1989
                                                                              Score 108; DB 8;
Pred. No. 3.6e-06;
1; Mismatches C
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                                                                                                                      Length 430;
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RESULT 95
US-09-952-318A-19
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Sequence 19, Application US/09952318A
Publication No. US2003024979A1
GENERAL INFORMATION:
APPLICANT: Kubersampath et al.
TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS
TITLE OF INVENTION: METABOLIC BONE DISEASE
FILE REFERENCE: JJJ-P06-522
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: .617/248-7100
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
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CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: US
FILING DATE:
FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM;
MEDIUM TYPE; Floppy disk
COMPUTER: IBM PC Computible
OPERATING SYSTEM; PC-DOS/MS-DOS
OPERATING BYSTEM; PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:

ADDRESSEE: TESTA HURWITZ & THIBEAULT
STREET: 55 STATE STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: PANG, ROY HL
APPLICANT: COHEN, CHARLES M
TITLE OF INVENTION: MORPHOGEN-INDUCED NERVE REGENERATION AND
TITLE OF INVENTION: REPAIR
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 07/752,764 FILING DATE: 30-AUG-1991 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US OF FILING DATE: 11-MAR-1991 PRIOR APPLICATION DATA: APPLICATION NUMBER: US OF APPLICATION NUMBER: U
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APPLICATION NUMBER:
FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRI
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ZIP: 02140
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   385 INPUTVPKPCCAPTQLNAIS 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ch 97.3%; Score 108; DB 8; I Similarity 95.0%; Pred. No. 3.6e-06; 19; Conservative 1; Mismatches C
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1: 430 amino acids
amino acid
GY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      M
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OPPERMANN, HERMANN
OZKAYNAK, ENGIN
PANG, ROY HL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ASU
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US 07/667,274
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 8; Length 430;
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PRIOR APPLICATION NUMBER: 08/432,883
PRIOR PILLING DATE: 1995-05-02
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR APPLICATION NUMBER: 07/923,780
PRIOR APPLICATION NUMBER: 07/752,847
PRIOR APPLICATION NUMBER: 07/752,847
PRIOR APPLICATION NUMBER: 07/657,274
PRIOR PILLING DATE: 1991-08-30
PRIOR APPLICATION NUMBER: 07/667,274
PRIOR PILLING DATE: 1991-03-11
PRIOR PILLING DATE: 1991-03-11
NUMBER: 07/667,274
PRIOR PILLING DATE: 1991-03-11
SEQ ID NO 19
SECTIMARE: Patentin version 3:1
SECTIMARE: 07/91-03-11
SEQ ID NO 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 4, Application US/10122026 Publication No. US20030105004A1 GENERAL INFORMATION:
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PRIOR APPLICATION NUMBER: 09/170,936
PRIOR FILING DATE: 1998-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/952,318A CURRENT FILING DATE: 2001-09-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ENGTH: 430
                                                                                                                                                                                                                                                          COUNTRY: USA
ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/122,026
FILING DATE: 29-Aug-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/402,542
PILING DATE: 13-MAR-1995
APPLICATION NUMBER: US 08/840,510
PILING DATE: 31-MAR-1993
APPLICATION NUMBER: US 08/029,335
PILING DATE: 04-MAR-1993
APPLICATION NUMBER: US 07/971,091
PILING DATE: 03-NOV-1992
APPLICATION NUMBER: US 07/946,235
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TUCKER, RONALD F
RUEGER, DAVID C
OPPERMANN, HERMAN
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KUBERASAMPATH, THANGAVEL
TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
OF MATTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  385 INPDTVPKPCCAPTQLNAIS 404
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19; Conserv
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STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Patent Administrator, Testa, Hurwitz & Thibeault, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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FILING DATE: 16-SEP-1992

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RESULT 97
US-10-050-050-19
US-10-050-050-19
Pedication No. US20030125230A1
Publication No. US20030125230A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear

MOLECULE TYPE: Protein

SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-10-122-026-4
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Best Local Similarity
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                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/461,113
FILING DATE: <UNKNOWN:
APPLICATION NUMBER: US 08/445,882
FILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PETENTIN Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT /
STREET: 45 SOUTH ST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELLS NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: STK-060CN
MATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-MAR-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      385 INPDTVPKPCCAPTQLNAIS 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19;
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                                                                                                                                                                     APPLICATION NUMBER: US/10/050,050
FILING DATE: 15-Jan-2002
CLASSIFICATION: -Unknown>
NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                                           STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                       CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 430 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: CAMACHO, JENNIFER A. REGISTRATION NUMBER: 43,526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 07/938,336 FILING DATE: 28-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/923,780 FILING DATE: 31.JUL-1992
APPLICATION NUMBER: US 07/752,857 FILING DATE: 30-AUG-1991
APPLICATION NUMBER: US 07/752,764
APPLICATION NUMBER: US 07/752,764
APPLICATION NUMBER: US 07/752,764
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SMART, JOH
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PANG, ROY H.L.
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COHEN, CHARLES M.
CHARETTE, MARC F.
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97.3%;
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Pred. No. 3.6e-06;
1; Mismatches 0;
                                                                                                                                                                                                                                                  Version
                                                                                                                                                                                                                                                                                                                                                                                                                                            CREATIVE BIOMOLECULES
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Matches
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US-10-321-799-25
; Sequence 25, Applicati
; Publication No. US2003
; GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local L
                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/321,799
FILING DATE: 17-Dec-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA,
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MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 19:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: OPPERMANN, HERMANN
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APPLICATION NUMBER: US 07/621,988
FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/810,560
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-AUG-1990
                                                                                                                    APPLICATION NUMBER: US 07/827,052
FILLING DATE: 28 JAN-1992
APPLICATION NUMBER: US 07/579,865
FILLING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
FILLING DATE: 4-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                      APPLICATION NUMBER: US 08/147,023
FILING DATE: 1-NOV-1993
APPLICATION NUMBER: US 07/841,646
FILING DATE: 21-FEB-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: MASSACHUSETTS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 430 amino acids TYPE: amino acid
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vo. US20030224996A1
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KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
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) 435-6951
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Pred. No. 3.6e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 430;
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NUMBER: US 07/600,024 : 18-OCT-1990

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LENGTH: 430 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 25:
US-10-321-799-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/179,406
APPLICATION NUMBER: US 07/232,630
FILLING DATE: 15-AUG-1988
APPLICATION NUMBER: US 07/315,342
FILLING DATE: 15-AUG-1988
APPLICATION NUMBER: US 07/660,162
FILLING DATE: 22-FEB-1989
APPLICATION NUMBER: US 07/422,699
FILLING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,613
APPLICATION NUMBER: US 07/422,613
FILLING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,613
FILLING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILLING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILLING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILLING DATE: 17-OCT-1989
APPLICATION NUMBER: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILLING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/4
SOFTWARE: PATENTIA Release #1.0, Version CURRENT APPLICATION DATA: APPLICATION NUMBER: US/10/428,997A FILING DATE: 02-May-2003 CLASSIFICATION: <Unknown>PRIOR APPLICATION DATA:
                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floopy disk
COMPUTER: TABLE FO compatible
COMPUTER: TABLE FO COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PANG, ROY H.L.
TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     385 INPDTVPKPCCAPTQLNAIS 404
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APPLICATION NUMBER: US
FILING DATE: 22-FEB-199
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                                                                                                                                                                                                                                                                                                                                                                 STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/10428997A
O. US20040077546A1
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OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KUBERASAMPATH, TI
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 108; DB 14;
Pred. No. 3.6e-06;
1; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 430;
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SEQUENCE DESCRIPTION: SEQ ID NO: 25:
US-10-428-997A-25
                                                                                                                                            RESULT 100
US-10-302-812-26
                                                     Sequence 26, Application US/10302812 Publication No. US20040087016A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 19; Conserv
                         APPLICANT: Keating et al
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: 25: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
ATTORNEY/AGENT INFORMATION:
NAME: BRIAN FAIRCHILD
REGISTRATION NUMBER: 48,645
REFERENCE/DOCKET NUMBER: STK-015C
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                   385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 07/660,162
FILING DATE: 22 FEB-1991
APPLICATION NUMBER: US 07/422,699
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-CCT-1989
FILING DATE: 17-CCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 07/179,406
FILING DATE: 08-APR-1988
APPLICATION NUMBER: US 07/232,630
FILING DATE: 15-AUG-1988
APPLICATION NUMBER: US 07/315,342
FILING DATE: 23-FEB-1989
ADDITANATION NUMBER: US 07/315,342
                                                                                                                                                                                                                                                                                                   1 INPETVPKPCCAPTQLNAIS 20
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FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 08/147,023 FILING DATE: 1-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 08/957,425 FILING DATE: 24-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 430 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 07/569,920 FILING DATE: 20-AUG-1990 APPLICATION NUMBER: US 07/600,024 FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 07/810,560 FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 07/579,865
FILING DATE: 7-SEP-1990
FILING DATE: 7-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 07/599,543
FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/616,374
FILING DATE: 21-NOV-1990
APPLICATION NUMBER: US 07/483,913
FILING DATE: 22-FEB-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: 617/248-7000
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                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                97.3%;
                                                                                                                                                                                                                                                                                                                                                                                    1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                   Score 108; DB 15;
Pred. No. 3.6e-06;
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3ER: STK-015C1
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RESULT 99 US-10-428-997A-25

Matches

19;

Conservative

Query Match Best Local Similarity

Sequence 25, Appropriate Publication No.

GENERAL INFORMATION: APPLICANT: OPPE

CITY: BOSTON COUNTRY: U.S.A.

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APPLICANT: Harrison, Leonard C.
APPLICANT: Jiang, Fang-Xu
APPLICANT: Jiang, Fang-Xu
APPLICANT: Gomez, Leonel Jorge
TITLE OF INVENTION: Pancreatic islet cell growth factors
FILE REFERENCE: Davies Collison Cave
CURRENT APPLICATION UMUMBER: US/09/784,911
CURRENT FILING DATE: 2001-09-17
NUMBER OF SEQ ID NOS: 30
SOFTWARE: Patentin version 2.1
SEQ ID NO 12
LENGTH: 433
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Kuberasampath, Thangavel
APPLICANT: Oppermann, Hermann
APPLICANT: Rueger, David C.
TITLE OF INVENTION: Protein Induced Morphogenesis
FILE REFERENCE: CBM-2 DIV (00960-502 DIV)
CURRENT APPLICATION NUMBER: US/10/385,064
CURRENT FILING DATE: 2003-03-10
PRIOR APPLICATION NUMBER: US/09/464,206
PRIOR APPLICATION NUMBER: US/09/464,206
PRIOR FILING DATE: 1999-12-15
PRIOR FILING DATE: 1995-03-01
NUMBER OF SEQ ID NOS: 16
                                                                                                                                                                                                                                                                                                                                           US-09-784-911-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; LENGTH: 430
; TYPE: PRT
; ORGANISM: Murinae gen. sp.
US-10-385-064-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 101
US-10-385-064-16
Sequence 16, Application US/10385064
Publication No. US20040102373A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: PRT; ORGANISM: Mus musculus US-10-302-812-26
                                                                                                                                                                                                                                                                       Sequence 12, Application US/09784911 Patent No. US20020072115A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/302,812
CURRENT FILING DATE: 2002-11-21
NUMBER OF SEQ ID NOS: 78
SOFTWARE: PatentIn version 3.1
SEQ ID NO 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR CELL DEDIFFERENTIATION AND TITLE OF INVENTION. TISSUE REGENERATION FILE REFERENCE: HYDR-F02-004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENGTH: 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ch 97.3%; Score 108; DB 15; Length 430; l Similarity 95.0%; Pred. No. 3.6e-06; 19; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 INPETVPKPCCAPTQLNAIS 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 108; DB 16;
Pred. No. 3.6e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 430;
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                                                                                                                                     ; ORGANISM: Mus musculus US-10-367-094-168
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US-10-367-094-168
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: mouse US-09-784-911-14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: PRT ; ORGANISM: mouse US-09-784-911-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 103
US-09-784-911-14
                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/10/367,094
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 203
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 168
LENGTH: 456
TYPE: PRT
                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: David W. Morris
APPLICANT: Marc Malandro
TITLE OF INVENTION: Novel Therapeutic Targets in Cancer
FILE REFERENCE: 529452001500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 19; Conserv
                                                                     Matches
                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                              Sequence 168, Application US/10367094 Publication No. US20040170982A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn version 2.1
SEQ ID NO 14
LENGTH: 435
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Harrison, Leonard C.
APPLICANT: Jiang, Fang-Xu
APPLICANT: Stanley, Edouard Guy
APPLICANT: Stanley, Edouard Guy
APPLICANT: Gonez, Leonel Jorge
TITLE OF INVENTION: Pancreatic islet cell growth factors
FILE REFERENCE: Davies Collison Cave
CURRENT APPLICATION NUMBER: US/09/784,911
CURRENT FILING DATE: 2001-09-17
NUMBER OF SEQ ID NOS: 30
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Best Local (
411 INPDTVPKPCCAPTQLNAIS 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    390 INPOTVPKPCCAPTQLNAIS 409
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                                                                   19;
                         1 INPETVPKPCCAPTQLNAIS 20
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19; Conservative
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                                                                   Conservative
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                                                                                97.3%;
95.0%;
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95.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97.3%;
                                                               Score 108; DB 16; Length 456; Pred. No. 3.8e-06; Indels 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 108; DB 9;
Pred. No. 3.7e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 108; DB 9; L
Pred. No. 3.6e-06;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 435;
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RESULT 105 US-10-122-026-14

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US-10-122-026-14
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Publication No. US20030105004A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                INFORMATION
                                                                                       PUBLICATION: 1.438
PUBLICATION INFORMATION: AUTHORS: LYONS, JOURNAI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC COMPATIBLE

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTMARE: PATENITA Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/122,026

FILING DATE: 29-Aug-2002

CLASSIFICATION: CUNKNOWN>

PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KUBERASAMPATH, THANGAVEL
TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
OF MATTER
                                                                                                                                                                                                                                                                                                                                       NAME: CAMACHO, JENNIFER A.
REGISTRATION NUMBER: 43,526
REFERENCE/DOCKET NUMBER: STK-060CN
NMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                     MOLECULE TYPE: protein FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 11-MAR-1991 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                            TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 08/402,542
FILLING DATE: 13-MAR-1995
APPLICATION NUMBER: US 08/840,510
FILLING DATE: 31-MAR-1993
APPLICATION NUMBER: US 08/029,335
FILLING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
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                                                                                                                                                                                                    NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 07/752,764
FILING DATE: 30-AUG-1991
APPLICATION NUMBER: US 07/667,274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PPLICATION NUMBER: US 07/752,857 ILING DATE: 30-AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PLICATION NUMBER: US 07/923,780
LING DATE: 31-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LICATION NUMBER: US 07/938,336
ING DATE: 28-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LICATION NUMBER: US 07/946,235
ING DATE: 16-SEP-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LICATION NUMBER: US 07/971,091
                   DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BOSTON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OPPERMANN, HERMANN
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                                                         4554-4558
                                                                                              LYONS,
Proc. Natl.
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/029,386
CURRENT FILING DATE: 2001-12-20
NUMBER OF SEQ ID NOS: 34288
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 29756
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Best Local S
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APPLICANT: Hanzel, David K.
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL
TITLE OF INVENTION: EXPRESSION ANALYSIS TWO
FILE REFERENCE: AEOMICA-X-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K
                                                                                                                                                                                                                                                                                               GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:

OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 2
OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 1.6
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 1.2
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 1.2
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 1.2
OTHER INFORMATION: EXPRESSED IN LING, SIGNAL = 0.91
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 0.87
OTHER INFORMATION: SWISSPROT HIT: P20722, EVALUE 6.00e-24
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                                                                                                        CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                          APPLICANT:
               COUNTRY:
                                                     CITY: BOSTON
                                                                    STREET:
                                                                                      DDRESSEE
                                                                                                                                             LICANT: COHEN, CHARLES M
LE OF INVENTION: MORPHOGEN-INDUCED NERVE REGENERATION AND
LE OF INVENTION: REPAIR
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17; Conserv
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No. US20030104993A1
                                                                        E: TESTA HURWITZ & THIBEAULT 55 STATE STREET
               USA
                                                                                                                                                                                                 OPPERMANN, HERMANN
OZKAYNAK, ENGIN
PANG, ROY HL
                                                                                                                                                                                                                                                          KUBERASAMPATH,
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US20030194704A1
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Pred. No. 1.3e-05;
2; Mismatches 1
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Pred. No. 1.2e-05;
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible

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FILE REFERENCE: JJJ-P06-522

CURRENT APPLICATION NUMBER: US/09/952,318A

CURRENT FILING DATE: 2001-09-13

PRIOR APPLICATION NUMBER: 09/170,936

PRIOR APPLICATION NUMBER: 09/170,936

PRIOR PRIOR OF THE STATE STA
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Kubersampath et al.
TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS
TITLE OF INVENTION: METABOLIC BONE DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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ORIGINAL SOURCE:
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FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 0 FILING DATE: 11-MAR-1991 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: 617/248-7000
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APPLICATION NUMBER: 1
FILING DATE:
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APPLICATION NUMBER:
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REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-070
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM:
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TYPE: amino acid
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FILING DATE: 1991-08-30
APPLICATION NUMBER: 07/667,274
FILING DATE: 1991-03-11
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85.0%;
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n Release #1.0, Version #1.25
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RESULT 110
US-10-050-050-28
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US-09-952-318A-28
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Best Local
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PRIOR APPLICATION NUMBER: 07/667,274
PRIOR FILING DATE: 1991-03-11
NUMBER OF SEQ ID NOS: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: 08/432,883
PRIOR FILING DATE: 1995-05-02
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR FILING DATE: 1993-09-01
PRIOR FILING DATE: 1993-09-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT FILING DATE: 2001-09-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 07/923,780
PRIOR FILING DATE: 1992-07-31
PRIOR APPLICATION NUMBER: 07/752,847
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Kubersampath et al.
TITLE OF INVENTION: METABLIC BONE DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 09/170,936
                                                                                                                                                                                                          GENERAL INFORMATION
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TYPE: PRT
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NUMBER OF SEQUENCES: 33 CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                              INVENTION: MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELLS
                                                                 OPPERMANN, HERMANN
PANG, ROY H.L.
OZKAYNAK, ENGIN
SMART, JOHN E.
                                                                                                                                 COHEN, CHARLES M.
CHARETTE, MARC F.
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                               87.4%;
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85.0%;
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Pred. No. 2.
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Pred. No. 2
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                                                                                                                                                                                                                                                                                                                                                                                                                    .5e-05;
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                                                                                                                                                                                                                                                                                                                                                                                                0;
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CURRENT APPLICATION DATA:

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CURRENT FILING DATE: 2001-03-20
PRIOR APPLICATION NUMBER: PCT/US99/05908
PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: PCT/US98/19772
PRIOR APPLICATION NUMBER: PCT/US98/19772
PRIOR FILING DATE: 1998-09-22
NUMBER OF SEQ ID NOS: 41
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 29
LENGTH: 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 17; Conserva
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                                                                    Query Match
Best Local S
Matches 17
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NAME: PITCHER ESQ, EDMUND R
REGISTRATION UNMBER: 27,829
REFERENCE/DOCKET NUMBER: STK-1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-248-7000
TELEPAX: 617-248-7100
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 102 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 29, Application U Patent No. US20020169292A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Bruce D. Weintraub
APPLICANT: Mariusz W. Szkudliński
APPLICANT: University of Maryland
TITLE OF INVENTION: CYSTINE KNOT GROWTH FACTOR MUTANTS
FILE REFERENCE: UOFMD.003C1
                                                                                                                                                                 TYPE: PRT
ORGANISM: HOMO SAPIEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 1..102
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: Protein LOCATION: 1..102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 08/478,097 FILING DATE: 07-JUN-1995 CLASSIFICATION:
                                                                      Local Similarity 85.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/09/496,398 FILING DATE: 02-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                57 MNPEYVPKPCCAPTKLNAIS 76
68 MNPEYVPKPCCAPTKLNAIS 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 INPETVPKPCCAPTQLNAIS 20
                             1 INPETVPKPCCAPTQLNAIS 20
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                                                                                        87.4%;
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Pred. No. 2.
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                                                                      Score 97; DB 9;
Pred. No. 2.8e-05;
2; Mismatches 1
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                                                                                                          Length 112;
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, NAME/KEY: Protein
; LOCATION: 1..102
; OTHER INFORMATION: /label= BMP6
; SEQUENCE DESCRIPTION: SEQ ID NO: 28:
US-10-050-050-28

TOPOLOGY: linear MOLECULE TYPE: protein

STRANDEDNESS: single TOPOLOGY: linear LENGTH: 102 amino acids
TYPE: amino acid

FEATURE:

TELEPHONE: (508) 435-9001
TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: 28:

SEQUENCE CHARACTERISTICS:

NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCELOCKET NUMBER: CRP-074DV
TELECOMMUNICATION INFORMATION:

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/461,113
FILING DATE: «Unknown»
APPLICATION NUMBER: US 08/445,882
FILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:

APPLICATION NUMBER: US/10/050,050 FILING DATE: 15-Jan-2002 CLASSIFICATION: «Unknown»

ZIP: 01748

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
CITY: HOPKINTON

STATE: MA

맑

57 MNPEYVPKPCCAPTKLNAIS 76

1 INPETVPKPCCAPTQLNAIS 20

Matches Query Match Best Local :

17;

Conservative

Similarity

87.4%;

Score 97; DB Pred. No. 2.5e 2; Mismatches

DB 14; Length 102; 2.5e-05;

0

US-10-187-394-14

Sequence 14, Application US/10187394 Publication No. US20030176667A1 GENERAL INFORMATION:

APPLICANT: KECK, PETER
APPLICANT: SMART, JOHN
TITLE OF INVENTION: SINGLE CHAIN ANALOGS OF TGF-B
TITLE OF INVENTION: SUPERFAMILY (MORPHONS)
NUMBER OF SEQUENCES: 45

CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR; TESTA, HURWITZ
ADDRESSEE: THIBEAULT, LLP
STREET: 125 HIGH STREET
CITY: BOSTON
CITY: BOSTON

COMPUTER READABLE FORM: MEDIUM TYPE: Floppy

MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS

PatentIn Release #1.0, Version #1.25

COUNTRY: US ZIP: 02110

. MA . USA

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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER ISM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/389,705
FILING DATE: 03-Sep-1999
CLASSIFICATION NUMBER: US/09/389,705
FILING DATE: 03-Sep-1999
PRIOR APPLICATION NUMBER: 09/153,733
APPLICATION NUMBER: 09/153,733
APPLICATION NUMBER: 09/153,733
APPLICATION NUMBER: 09/153,733
ATTORNEY,AGENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD2279 PCT
TELEPHONE: (619) 455-5100
TELEPAX: (619) 455-5100
INFORMATION ORR SEQ. ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 118 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 113
US-09-389-705-11
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                                                                                                                                                                                                                                                                                                              RESULT 114
US-10-115-406-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                       Sequence 9, Application US/10115406 Publication No. US20020127612A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 11, Application US/09389705
Publication No. US20010018509A1
GENERAL INFORMATION:
APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE APPLICANT: LEE, Se-JOHN TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9 FILE REFERENCE: JHU1190-3 US/10/115,406 CURRENT APPLICATION NUMBER: US/10/115,406 CURRENT FILING DATE: 2002-04-02 PRIOR APPLICATION NUMBER: 09/301,520 PRIOR APPLICATION NUMBER: 09/301,520 PRIOR PRIOR DATE: 1999-04-28 PRIOR PRICATION NUMBER: US 09/172,062 PRIOR FILING DATE: 1998-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
NUMBER OF SEQUENCES: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                           73 MNPEYVPKPCCAPTKLNAIS 92
                                                                                                                                                                                                                                                                                                                                                                                                                                  1 INPETVPKPCCAPTQLNAIS 20 : | | | | | | | | | | | | | |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: Protein LOCATION: 1..118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLONE: Vgr-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2; Mismatches
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Pred. No. 2.
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2.9e-05;
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NAME/KBY: Protein

LOCATION: 1..118

SEQUENCE DESCRIPTION: SEQ ID NO: 11:
US-10-154-333-11
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US-10-154-333-11
Sequence 11, Application US/10154333
Publication No. US20030109684A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 85.0
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR ETLING DATE: 1995-10-23
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR FILING DATE: 1994-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1993-01-12
NUMBER OF SEQ ID NOS: 28
                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (619) 455-5
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
COMPUTERION DATA:
APPLICATION NUMBER: US/01/154,333
FILING DATE: APPLICATION NUMBER: US/09/389,705
FILING DATE: 03-Sep-1999
APPLICATION NUMBER: US/09/389,705
FILING DATE: 03-Sep-1999
APPLICATION NUMBER: US/09/389,705
FILING DATE: CUNKNOWN>
APPLICATION NUMBER: 09/153,733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENGTH: 118
                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: FD2279 PCT TELECOMMUNICATION INFORMATION: TELEPHONE: (619) 455-5100
                                                                                                                                                                                 TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:
ADDRESSE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: JOHNS HOPKINS UNIVERSITY
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                                                                                                                                                                                                                                                                     STRANDEDNESS: single
                                                                                                                                                         CLONE: Vgr-1
                                                                                                                                                                                                                                                                                                   TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                           LENGTH: 118 amino acids
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Pred. No. 2.9e-05;
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US-09-813-459-12
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                                                                                                                                                                                                                                                                                                                                                   Sequence 12, Application US/09813459 Patent No. US20020107369A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 28
SOFTWARE: PatentIn version 3.1
SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 9, Application US/10704223
Publication No. US20040152143A1
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR FILING DATE: 1995-10-23
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR FILING DATE: 1994-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1993-01-12
RIOR FILING DATE: 1993-01-12
NUMBER OF TO TO NOTE: 1993-01-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: LEE, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
FILE REFERENCE: JHU1190-7
CURRENT APPLICATION NUMBER: US/10/704,223
CURRENT FILING DATE: 2003-11-07
PRIOR APPLICATION NUMBER: US 10/115,406
PRIOR FILING DATE: 2002-04-02
PRIOR FILING DATE: 1002-04-02
PRIOR APPLICATION NUMBER: US 09/301,520
PRIOR APPLICATION NUMBER: US 09/301,520
PRIOR FILING DATE: 1999-04-28
PRIOR FILING DATE: 1999-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1998-10-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: THE JOHNS HOPKINS UNIVERSITY APPLICANT: LEE, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ENGTH:
            COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                      TITLE OF INVENTION: GROWTH NUMBER OF SEQUENCES: 26
                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73 MNPEYVPKPCCAPTKINAIS 92
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17; Conserv
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17; Conservative
                                                                                                                                                                          CITY: Los Angeles
STATE: California
APPLICATION NUMBER: US/09/813,459
                                                                                                                                     ZIP:
                                                                                                                                                                                                             ADDRESSEE: Spensley Horn Jubas & Lubitz
STREET: 1880 Century Park East, Suite 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                                                                                                                                                                                                                  Lee, Se-Jin
                                                                                                                                                       USA
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: Pred. No. 2.9e
2; Mismatches
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Pred. No. 2.9e-05;
2; Mismatches 1
                                                                                                                                                                                                                                                                                             US20020107369A1een
DIFFERENTIATION FACTOR-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 14; Length 118;
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2.9e-05;
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      Query Match
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                          NUMBER OF SEQ ID NOS: 51
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 39, Application US/09859211
Patent No. US20020157125A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 08/862,445
PRIOR FILING DATE: 1997-05-23
PRIOR APPLICATION NUMBER: 08/847,910
PRIOR FILING DATE: 1997-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/859,211
CURRENT FILING DATE: 2001-05-15
PRIOR APPLICATION NUMBER: 09/019,070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Lee, Se-Jin
APPLICANT: McPherron, Alexandra C.
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
FILE REFERENCE: 07265/144001
FILE REFERENCE: 07265/144001
                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: 08/033,923 PRIOR FILING DATE: 1993-03-19
                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 08/525,596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1998-02-05
                                                                                                                  TYPE: PRT
ORGANISM: Homo
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                                                                                                                                                     LENGTH:
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MOLECULE TYPE: pri
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                             FILING DATE: 1995-10-26
APPLICATION NUMBER: PCT/US94/03019
                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 08/795,071 FILING DATE: 1997-02-05
                                                                                                                                                                                                                                                                          FILING DATE: 1994-03-18
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ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: PD-3054 TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 20-Mar-2001
CLASSIFICATION: <Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 119 amino acids
TYPE: amino acid
STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLONE: Vgr-1
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                                     87.4%;
85.0%;
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                                     Score 97; DB 9;
Pred. No. 2.9e-05
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Pred. No. 2.9e
2; Mismatches
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                                                            Length 119;
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RESULT 120
US-09-872-856-39
US-09-872-856-39
Sequence 39, Application US/09872856
Publication No. US20030074680A1
GENERAL INFORMATION:
APPLICANT: Johns Hopkins University School of Medicine
APPLICANT: Lee, Se-Jin
APPLICANT: McPherron, Alexandra
TITLE OF INVENTION: Growth Differentiation Factor-8
FILE REFERENCE: JMU120-17
CURRENT APPLICATION NUMBER: US/09/872,856
CURRENT FILING DATE: 2001-06-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 119
US-09-880-708-17
; Sequence 17, Application US/09880708
; Patent No. US20020165361A1
; GENERAL INFORMATION:
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Best Local
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INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 12-Jun-2001

PRIOR APPLICATION UNKER: 09/145,060

FILING DATE: <Unknown
APPLICATION NUMBER: 08/003,144

FILING DATE: 12-JAN-1933

ATTORNEY/AGENT INFORMATION:
NAME: Lies A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347

REFERENCE/DOCKET NUMBER: 07265/057002

TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/880,708
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ADDRESSEE: Gray Cary Ware & Freidenrich LLP
STREET: 4365 Executive Drive, Suite 1600
CITY: San Diego
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IMMEDIATE SOURCE:
CLONE: Vgr-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: GROWIH DIFFERENTIATION FACTOR-5 NUMBER OF SEQUENCES: 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE DESCRIPTION: SEQ ID NO: 17:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Lee, Se-Jin
                                                                                                                                                                                                                                                                                                               74 MNPEYVPKPCCAPTKLNAIS 93
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                                                                                                                                                                                                                                                                                                                                                                                               l Similarity 85.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 119 amino acids TYPE: amino acid
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Pred. No. 2.9e-05;
2; Mismatches 1.
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RESULT 121
US-10-335-483-21
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PRIOR FILING DATE: 1997-02-05
PRIOR PELICATION NUMBER: US 08/525,596
PRIOR FILING DATE: 1995-10-25
PRIOR APPLICATION NUMBER: PCT/US 94/03019
PRIOR FILING DATE: 1994-03-18
PRIOR APPLICATION NUMBER: US 08/033,923
PRIOR APPLICATION NUMBER: US 08/033,923
PRIOR FILING DATE: 1993-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 21, Application US/10335483 Publication No. US20030120058A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Pa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
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PRIOR APPLICATION NUMBER: US
PRIOR FILING DATE: 1997-04-28
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PRIOR FILING DATE: 1998-07-28
PRIOR APPLICATION NUMBER: US 09/019,070
PRIOR FILING DATE: 1998-02-05
PRIOR PILING DATE: 1998-02-05
PRIOR APPLICATION NUMBER: US 08/862,445
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TYPE: PRT
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         INFORMATION
PRICATION NUMBER: US/10/335,483
FILING DATE: 31-Dec-2002
CLASSIFICATION: <UNKnown>
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/09/177,860
FILING DATE: <UNKnown>
APPLICATION NUMBER: US/09/177,860
FILING DATE: 10-SEP-1995
APPLICATION NUMBER: 1975
APPLICATION NUMBER: 1974
APPLICATION NUMBER: 1974
FILING DATE: 00-JUL-1994
ATTORNEY/AGENT INFORMATION:
NAME: Wetherell, Jr., Ph.D, John R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: 07265/075001
TELEPHONE: 619-678-5070
TELEPAX: 619-678-5099
NFORMATION FOR SEQ ID NO: 21:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lee, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
NUMBER OF SEQUENCES: 32
                                                                                                                                                                                                                                                                                                                                                                                                              OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
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l Similarity 85.0%;
17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: La Jolla
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Diskette COMPUTER: IBM Compatible
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Pred. No. 2.9e-05;
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Gaps

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RESULT 123
US-10-693-536-11
; Sequence 11, Application US/10693536
; Publication No. US20040067556A1
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                                                                                                                                                                                                                                                                                                                                    ; LENGTH: 119
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-463-973-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: JHU1100-17

CURRENT APPLICATION NUMBER: US/10/463,973

CURRENT FILING DATE: 2003-06-17

PRIOR APPLICATION NUMBER: US/09/872,856

PRIOR FILING DATE: 2001-06-01

PRIOR PELICATION NUMBER: US 09/124,180

PRIOR PELICATION NUMBER: US 09/124,180

PRIOR APPLICATION NUMBER: US 09/019,070

PRIOR APPLICATION NUMBER: US 09/019,070

PRIOR FILING DATE: 1998-02-05

PRIOR PELICATION NUMBER: US 08/862,445

PRIOR APPLICATION NUMBER: US 08/847,910

PRIOR FILING DATE: 1997-05-23

PRIOR APPLICATION NUMBER: US 08/795,071

PRIOR APPLICATION NUMBER: US 08/795,071

PRIOR APPLICATION NUMBER: US 08/795,971

PRIOR APPLICATION NUMBER: US 08/525,596

PRIOR APPLICATION NUMBER: DCT/US 94/03019
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                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: PatentIn version 3.1 SEQ ID NO 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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Best Local Similarity
Matches 17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 1994-03-18
PRIOR APPLICATION NUMBER: US 08/033,923
PRIOR FILING DATE: 1993-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Johns Hopkins University School of Medicine APPLICANT: Lee, Se-Jin APPLICANT: McPherron, Alexandra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Lee, Se-Jin
APPLICANT: McPherron, Alexandra
TITLE OF INVENTION: Growth Differentiation Factor-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 53
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
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85.0%;
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Pred. No. 2.9e-05;
                                                                                                                                                                                                                                              2; Mismatches
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Pred. No. 2
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2.9e-05;
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NAME/KEY: Protein
LOCATION: 1..119
SEQUENCE DESCRIPTION: SEQ ID NO: 11:
US-10-693-536-11
                                                                                                                                                                                                                                                                   RESULT 124
US-10-758-210-11
                                                                                                                                                                                               Sequence 11, Application US/10758210 Publication No. US20040127696A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 17; Conserv
APPLICANT: LEE, Se-Jin
APPLICANT: HUYNH, Thanh
TITLE OF INVENTION: ANTIBODIES BINDING TO
FILE REFERENCE: JHU1130-2
CURRENT APPLICATION NUMBER: US/10/758,210
CURRENT FILING DATE: 2004-01-14
PRIOR APPLICATION NUMBER: US/09/412,791D
PRIOR FILING DATE: 1999-10-05
                                                                                                                                                     APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE APPLICANT: LEE, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (619) 678-51
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:

APPLICATION NUMBER: US/09/619,061

FILING DATE: 18-Jul-2000

APPLICATION NUMBER: US/09/097,616

FILING DATE: 15-JUN-1998

APPLICATION NUMBER: US 08/581,529

FILING DATE: 15-APR-1996

ATTORNEY/AGENT INFORMATION:

NAME: Lisa A. Haile, Ph.D.

REFERENCE/DOCKET NUMBER: 07265/082001

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:
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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOPTWARE: Patentin Release #1.0, V

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
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TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6
NUMBER OF SEQUENCES: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lee, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/10/693,536 FILING DATE: 23-Oct-2003 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: La Jolla
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLONE: Vgr-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  87.4%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Score 97; DB
; Pred. No. 2.9e
2; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 15;
2.9e-05;
                                                                                                                  GROWTH DIFFERENTIATION FACTOR-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 119;
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RESULT 125

US-10-366-345-62

(Sequence 62, Application US/10366345

; Publication No. US20030224501A1

; GENERAL INFORMATION:
   APPLICANT: Young, et al.
   TITLE OF INVENTION: Bone Morphogenetic Protein Polynucleotides, Polygeptides and
   TITLE OF INVENTION: Antibodies

; FILE REFERENCE: PT189

; FILE REFERENCE: PT189

; FILE REFERENCE: PT189
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, NAME/KEY: DOMAIN
; LOCATION: (1)..(143)
; OTHER INFORMATION:
US-10-002-278-5
                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 126
US-10-002-278-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo sapiens
US-10-366-345-62
                                                                                                                                                         FILE REFERENCE: 0575/40314-A
CURRENT APPLICATION NUMBER: US/10/002,278
CURRENT FILING DATE: 2001-11-02
NUMBER OF SEQ ID NOS: 18
SOFTWARE: PatentIn version 3.1
SEQ ID NO 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 21
SOFTWARE: PatentIn version 3.0
SEQ ID NO 11
                                                                                                                                                                                                                                                                                                                                           Sequence 5, Application US/10002278
Publication No. US20020132334A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/366,345
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 77
SOFTWARE: PatentIn version 3.2
SEQ ID NO 62
LENGTH: 139
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Best Local Similarity
Matches 17; Conserv
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Best Local
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PRIOR FILING DATE: 1996-01-09
PRIOR APPLICATION NUMBER: PCT/US94/07799
PRIOR FILING DATE: 1994-07-08
NUMBER OF SEQ ID NOS: 21
                                                                                                                                                                                                                                                                     APPLICANT: Jessell, Thomas M.
APPLICANT: Basler, Konard
APPLICANT: Yamada, Toshiya
TITLE OF INVENTION: CLONING, EXPRESSION AND USES OF DORSALIN-1
                                                                                                       ORGANISM: Artificial Sequence
                                                                                                                          LENGTH: 143
TYPE: PRT
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                                                                      OTHER INFORMATION: COOH-terminus of BMP-6
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nilarity 85.0%;
Conservative
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Pred. No. 3.
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Pred. No. 2.
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2.9e-05;
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Sequence 4, Application US/09784911

Patent No. US20020072115A1

PAPPLICANT: INFORMATION:
APPLICANT: Jiang, Fang-Xu
APPLICANT: Jiang, Fang-Xu
APPLICANT: Stanley, Edouard Guy
APPLICANT: Gonez, Leonel Jorge
FITLE OF INVENTION: Pancreatic islet cell growth factors
FILE REFERENCE: Davies Collison Cave
CURRENT APPLICATION NUMBER: US/09/784,911
CURRENT FILING DATE: 2001-09-17
NUMBER OF SEQ ID NOS: 30
SOFTWARE: Patentin version 2.1
SEQ ID NO 4
LENGTH: 437
TYPE: PRT
ORGANISM: mouse
PRATITED:
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US-09-784-911-4
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US-09-784-911-8
; Sequence 8, Application US/09784911
; Patent No. US20020072115A1
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                                                                   Query Match
Best Local Similarity
Matches 17; Conserv
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Best Local Similarity
Matches 17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Harrison, Leonard C.
APPLICANT: Jiang, Fang-Xu
APPLICANT: Stanley, Edouard Guy
APPLICANT: Stanley, Edouard Guy
APPLICANT: Gonez, Leonel Jorge
TITLE OF INVENTION: Pancreatic islet cell growth factors
FILE REPERENCE: Davies Collison Cave
CURRENT FILING DATE: 2001-09-17
RUMBER OF SEQ ID NOS: 30
RUMBER OF SEQ ID NOS: 30
                                                                                                                                                     FEATURE:
NAME/KEY: UNSURE
LOCATION: (186)
OTHER INFORMATION: X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 433
392 MNPEYVPKPCCAPTKLNAIS 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         388 MNPEYVPKPCCAPTKLNAIS 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98 MNPEYVPKPCCAPTKLNAIS 117
                       1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 INPETVPKPCCAPTQLNAIS 20
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ilarity 85.0%;
Conservative
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85.0%;
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Pred. No. 0.0001;
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Pred. No. 3.5e-05;
                                                                                   Score 97; DB 9; Length 437; Pred. No. 0.0001;
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-09-784-911-10

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RESULT 130
US-10-122-026-19
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LENGTH: 451
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19, Application Publication No. US2003010 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 10, Application US/09784911
Patent No. US20020072115A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Harrison, Leonard C. APPLICANT: Jiang, Fang-Xu APPLICANT: Stanley, Edouard Guy APPLICANT: Gonez, Leonel Jorge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           y Match 87.4%;
Local Similarity 85.0%;
hes 17; Conservative
                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                          ZIP: 02110
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KUBERASAMPATH, THANGAVEL TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS OF MATTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: JONES, WILLIAM K
TUCKER, RONALD F
RUEGER, DAVID C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                 PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 INPETVEKECCAPTQLNAIS 20
OR APPLICATION DATA:
APPLICATION NUMBER: US 08/402,542
FILING DATE: 13.-WAR-1995
APPLICATION NUMBER: US 08/840,510
FILING DATE: 31.-WAR-1993
APPLICATION NUMBER: US 08/029,335
FILING DATE: 04.-WAR-1993
APPLICATION NUMBER: US 07/971,091
FILING DATE: 03.-WO-1992
APPLICATION NUMBER: US 07/946,235
FILING DATE: 16-SEP-1992
                                                                                                                                                                                                                            APPLICATION NUMBER: US/10/122,026
FILING DATE: 29-Aug-2002
CLASSIFICATION: Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: BOSTON
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Patent Administrator, Testa, Hurwitz & Thibeault, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US20030105004A1
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OZKAYNAK, ENGIN
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RESULT 132

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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                           Sequence 33, Application US/10164279
Publication No. US20030185792A1
GENERAL INFORMATION:
                                                                                                                                                                                                               SEQ ID NO 33
                                                                   Matches
                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                    APPLICANT: Keck, P.
TITLE OF INVENTION: MORPHOGEN ANALOGS OF BOND MORPHOGENIC PROTEINS
FILE REFERENCE: CLIST-P04-566
CURRENT APPLICATION NUMBER: US/10/164,279
CURRENT FILING DATE: 2002-06-06
                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 09/791946
PRIOR FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 64
                                                                                                                                                                                                                                   SOFTWARE:
                                                                                                                                                        LENGTH: 513
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: STK-060CN INFORMATION FOR SEQ ID NO: 19: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 y Match 87.4%;
Local Similarity 85.0%;
nes 17; Conservative ;
                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: Protein LOCATION: 1.513 OTHER INFORMATION: PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE DESCRIPTION: SEQ ID NO: 19:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              468 MNPEYVPKPCCAPTKLNAIS 487
468 MNPEYVPKPCCAPTKLNAIS 487
                         1 INDETVPKPCCAPTQLNAIS 20
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FILING DATE: 28-AUG-1992
APPLICATION NUMBER: US 07/923,780
FILING DATE: 31-JUL-1992
APPLICATION NUMBER: US 07/752,857
FILING DATE: 30-AUG-1991
APPLICATION NUMBER: US 07/752,764
FILING DATE: 30-AUG-1991
APPLICATION NUMBER: US 07/752,764
                                                                   Similarity
17; Conserv
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JOURNAL:
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TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: CAMACHO, JENNIFER A. REGISTRATION NUMBER: 43,526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/667,274 FILING DATE: 11-MAR-1991
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                                                                     Conservative
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                                                                                  87.4%;
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Pred. No. 0.00012;
2; Mismatches
                                                                                      Score 97;
Pred. No.
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                                                                       Mismatches
                                                                                      DB 14;
0.00012;
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                                                                                                      Length 513;
                                                                       Indels
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US-10-366-345-38; Sequence 38, Application US/10366345; Publication No. US20030224501A1
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US-10-375-150-8
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US-10-291-265-816
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CURRENT APPLICATION NUMBER: US/10/291,265
CURRENT TILING DATE: 2000-01-25
PRIOR APPLICATION NUMBER: 09/491,404
PRIOR FILING DATE: 2000-01-25
PRIOR APPLICATION NUMBER: 09/617,746
PRIOR FILING DATE: 2000-07-17
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR APPLICATION NUMBER: 09/631,451
PRIOR APPLICATION NUMBER: 09/631,870
PRIOR APPLICATION NUMBER: 09/633,870
PRIOR FILING DATE: 2000-09-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Hyseq, Inc.
APPLICANT: Tang et al
APPLICANT: Tang et al
TITLE OF INVENTION: No. US2
TITLE OF SEPERENCE: 21272-017
                                                                                                Sequence 8, Application US/10375150 Publication No. US2003023588BA1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn version 3.2
SEQ ID NO 38
LENGTH: 513
TYPE: PRT
ORGANISM: Homo sapiens
3-10-366-345-38
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APPLICANT: Young, e
                                                                                                                                                                                                                                                                                                                                                                              Query Match
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CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Young, et al.
TITLE OF INVENTION: Bone Morphogenetic Protein Polynucleotides, Polypeptides and
TITLE OF INVENTION: Antibodies
FILE REFERENCE: PT189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 513
             APPLICANT: Israel, David
APPLICANT: Wolfman, Neil M.
TITLE OF INVENTION: Recombinant Bone Morphogenetic Protein
TITLE OF INVENTION: Heterodimers, Compositions and Methods of Use.
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                          Local
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1 Similarity 85.0%;
17; Conservative
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17; Conserv
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85.0%;
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                                                                                                                                                                                                                                                                                                                                                       Score 97; DB 14;
Pred. No. 0.00012;
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                                                                                                                                                                                                                                                                                                                                     Mismatches
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                                                                                                                                                                                                                                                                                                                                                                           Length 513;
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RESULT 135
US-08-260-675-13
US-08-260-675-13, Application US/08260675
; Publication No. US20030104993A1
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Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION: APPLICANT: RUEGER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 617-876-5851 INFORMATION FOR SEQ ID NO:
                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/280,675
                                                                                                             COUNTRY: USA
ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Kapinos, Ellen J.
REGISTRATION NUMBER: 32,245
REFERENCE/DOCKET NUMBER: GI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-876-1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: |
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/375,150
                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Tape
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
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CITY: BOSTON
                                                                                                                                                                                   STATE:
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CLASSIFICATION:
                                                                                                                                                                                                                               ADDRESSEE:
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USA
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   amino acid
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87 CambridgePark Drive
                                                                                                                                                                                                               E: TESTA HURWITZ & THIBEAULT
55 STATE STREET
                                                                                                                                                                                                                                                                                                                                                OPPERMANN, HERMANN
OZKAYNAK, ENGIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                 RUEGER, DAVID C
                                                                                                                                                                                                                                                                                                                  CHARLES M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 87.4%;
                                                                                                                                                                                                                                                                 MORPHOGEN-INDUCED NERVE REGENERATION AND REPAIR
33
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Pred. No. 0.
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0.00012;
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PRIOR APPLICATION DATA:
APPLICATION NUMBER:

US/08/126,100

APPLICATION NUMBER:

US/07/922,813

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; OTHER INFORMATION:
US-08-260-675-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/752,764
FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRP-070
TELEPHONE: 61/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: 617/248-7100
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
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PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 07/667,274
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NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein DRIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: MURIDAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 102 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ENGTH:
                COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
CITY: HOPKINTON
STATE: MA
                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELLS
                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           57 MNPEYVPKPCCAPTKVNAIS 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                              ZIP: 01748
APPLICATION NUMBER: US/10/050,050
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PANG, ROY H.L.
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                       COHEN, CHARLES M.
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                                                                                                                                                    USA
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Pred. No. 6.3e-05;
3; Mismatches 1
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57 MNPEYVPKPCCAPTKVNAIS 76

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US-10-385-064-13
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                                                                    ; OTHER INFORMATION: VGR-1-FX US-10-385-064-13
                                                                                                                                                                             PRIOR APPLICATION NUMBER: US/09/464,206
PRIOR FILING DATE: 1999-12-15
PRIOR FILING DATE: 1999-12-15
PRIOR APPLICATION NUMBER: 08/396,684
PRIOR FILING DATE: 1995-03-01
NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 13, Appropriate Publication No.
               Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                           APPLICANT: Rueger, David C.
TITLE OF INVENTION: Protein Induced Morphogenesis
FILE REFERENCE: CBM-2 DIV (00960-502 DIV)
CURRENT APPLICATION NUMBER: US/10/385,064
CURRENT FILING DATE: 2003-03-10
                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Cohen, Charles M.
APPLICANT: Kuberasampath, T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (508) 435-6
TELEFAX: (508) 435-6
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                        TYPE: PRT ORGANISM: Murinae gen. sp.
                                                                                                            FEATURE:
                                                                                                                                                                 LENGTH: 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: 1..102
OTHER INFORMATION: /note= "VGR-1(FX)"
SEQUENCE DESCRIPTION: SEQ ID NO: 13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: «Unknown»
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/461,113
PILING DATE: «Unknown»
APPLICATION NUMBER: US 08/445,882
PILING DATE: 22-WAY-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              57 MNPEYVPKPCCAPTKVNAIS 76
 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 102 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 15-Jan-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                           Oppermann, Hermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/10385064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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                 84.7%;
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Pred. No. 6.3e-05;
3; Mismatches 1
Score 94; DB
Pred. No. 6.3e
3; Mismatches
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                       .3e-05;
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US-08-260-675-27
Sequence 27, Application US/08260675
Publication No. US20030104993A1
; GENERAL INFORMATION:
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                                                                                                                                  RESULT 139
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US-10-187-394-30
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                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
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Publication No. US20030176667A1
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APPLICANT: KEG
APPLICANT: SMI
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                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: 617-248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDLUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION DATA:
PRIOR APPLICATION NUMBER: US/09/496,398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: SINGLE CHAIN ANALOGS OF TGF-B
                                                                                                                                                                                                                                                                                                           OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET:
                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: PITCHER ESQ, EDMUND R REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                      NAME/KEY: Protein
                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: 07-JUN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/0 FILING DATE: 02-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                             ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
                                                                                                                                                                             67
                                                                                                                                                                                                                                    19;
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                                                                                                                                                                            INPETVPKPASGGCAPTQLNAIS 89
                                                                                                                                                                                                      INPETVEKEC---CAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                               amino acid
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RUEGER, DAVID C
KUBERASAMPATH, THAN
OPPERMANN, HERMANN
OZKAYNAK, ENGIN
PANG, ROY HL
                                                                                                                                                                                                                                                                                                                                                                                                                           115 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PATENT ADMINISTRATOR; TESTA, HURWITZ THIBEAULT, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      UMBER: US 08/478,097
07-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                               single
                                                                                                                                                                                                                                                  81.5%;
82.6%;
                                                                                                                                                                                                                                                                                                           /note= "OP-1 MORPHON PROTEIN"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US/10/187,394
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                                             THANGAVEL
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                                                                                                                                                                                                                                                  Score 90.5; DB 1 Pred. No. 0.0002;
                                                                                                                                                                                                                                    Mismatches
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                                                                                                                                                                                                                                                                DB 14;
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RESULT 140
US-09-952-318A-27
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                                                                              Sequence 27, Application US/09952318A publication No. US20030224979A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                            Query Match
Best Local :
                APPLICANT: Kubersampath et al.
TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS IN
TITLE OF INVENTION: METABOLIC BONE DISEASE
FILE REFERENCE: JJJ-P06-522
CURRENT APPLICATION NUMBER: US/09/952,318A
                                                                                                                                                                                                                                                                                                                                                            PEATURE:
NAME/KEY: Protein
LOCATION: 1..102
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: lin
MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 0: FILING DATE: 11-MAR-1991 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 0'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC_compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/260,675
FILING DATB:
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: COHEN, C
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: 02140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADUNE STREET: SU STREET: SU STREET MA
                                                                                                                                                                                                                                                                          Local Similarity
nes 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CR
                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/126,100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ENGTH:
                                                                                                                                                                                                          59 PDHVPKPCCAPTKLNAIS 76
                                                                                                                                                                                                                                      3 PETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    102 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E: TESTA HURWITZ & THIBEAULT
55 STATE STREET
                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         617/248-7100
                                                                                                                                                                                                                                                                                                                                                                                                                                    HOMO SAPIENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CHARLES M
: MORPHOGEN-INDUCED NERVE REGENERATION AND
: REPAIR
                                                                                                                                                                                                                                                                                         78.4%;
                                                                                                                                                                                                                                                                                                                                                                /note= "BMP5"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US 07/667,274
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CRP-070
                                                                                                                                                                                                                                                                                            Score 87; DB 8;
Pred. No. 0.00052
                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                             DB 8;
                                                                                                                                                                                                                                                                                                         Length 102;
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PRIOR FILLING DATE: 1995-0-13
PRIOR APPLICATION NUMBER: 08/32,883
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR APPLICATION NUMBER: 09/9-0-01
PRIOR FILLING DATE: 1992-07-31
PRIOR FILLING DATE: 1992-07-31
PRIOR FILLING DATE: 1991-08-30
PRIOR FILLING DATE: 1991-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 141
US-10-050-050-27
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; ORGANISM: Homo sapiens
US-09-952-318A-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
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                                                                                                     APPLICATION NUMBER: US/08/461,113

APPLICATION UNMBER: US/08/445,882

APPLICATION UNMBER: US/08/445,882

FILING DATE: 22-MAY-1995

ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                        ZIP: 01748

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: PC PODS/MS DOS

OPERATING SYSTEM: PC-DOS/MS DOS

SOFTWARE: PATENTIA Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELLS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 33
NAME: FENTON ESQ., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                               PRIOR
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l Similarity 83.3%;
l5; Conservative
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                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/10/050,050
FILING DATE: 15-Jan-2002
CLASSIFICATION: CHANOWID
APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/10050050
vo. US20030125230A1
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PANG, ROY H.L.
OZKAYNAK, ENGIN
SMART, JOHN E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COHEN, CHARLES M.
CHARETTE, MARC F.
KUBERASAMPATH, THA
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
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Pred. No. 0
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0.00052;
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Matches
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INFORMATION FOR SEQ
SEQUENCE CHARAC
                                                                                          APPLICATION UNBER: US 08/478,097
FILING DATE: 07-JUN-1995
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUND R
REGISTRATION NUMBER: 27,829
REGISTRATION NUMBER: STK-059CN
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
            TELEFAX: 617-248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 102 amino acid
                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: SINGLE CHAIL TITLE OF INVENTION: SUPERFAMILY NUMBER OF SEQUENCES: 45
                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/496,398
FILING DATE: 02-FEB-2000
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 28-JUN
                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: US
ZIP: 02110
                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: PATENT ADMINISTRATOR; TESTA, HURWITZ ADDRESSEE: THIBEAULT, LLP
                                                                                ELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 1..102
OTHER INFORMATION: /label= EMP5
SEQUENCE DESCRIPTION: SEQ ID NO: 27:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS: single TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 PETVPKPCCAPTQLNAIS
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15; Conserv
amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PDHVPKPCCAPTKLNAIS 76
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TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   X
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to. US20030176667A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHARACTERISTICS:
                                                                                   617-248-7000
                                                                                                                                                                                                                                                                                                                  28-JUNE-2002
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83.3%;
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                                                                                                                                                                                                                                                                                                                                 US/10/187,394
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                                                                                                                   STK-059CN
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0.00052;
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MOLECULE TYPE:

protein

TOPOLOGY:

STRANDEDNESS:

Ss: single linear

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RESULT 144
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US-09-389-705-13
                                                                                                                   Matches
                                                                                                                                                 Query Match
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 09/153,733
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD2279 PCT
TELECOMYUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
TELEPAX: (619) 455-5110
                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY:
LOCATION:
                                                                                                                                                                                                LOCATION: 1..118
SEQUENCE DESCRIPTION: SEQ ID NO: 13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOTTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/389,705

FILING DATE: 03-Sep-1999

CLASSIFICATION: CUNKNOWN>

PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                 TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
NUMBER OF SEQUENCES: 29
                                                75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             59
                                                                             3 PETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15;
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                                                                                                                                 Similarity
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                                                                                                                                                                                                                    NAME/KEY: Protein LOCATION: 1..118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
                                                                                                                                                                                                                                                                   CLONE: BMP-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PDHVPKPCCAPTKLNAIS 76
                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                    ENGTH: 118 amino acids
                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                               78.4%;
83.3%;
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83.3%;
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                                                92
                                                                                                               2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 87; DB 14; Length 102; Pred. No. 0.00052; 2; Mismatches 1; Indels
                                                                                                                                 Score 87;
Pred. No.
                                                                                                                                 0.0006;
                                                                                                                                                 DB 9;
                                                                                                                                                 Length 118;
                                                                                                               Indels
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RESULT 145
US-10-154-333-13
; Sequence 13, Application US/10154333
; Publication US20030109684A1
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CURRENT FILING DATE: 2002-04-02
PRIOR APPLICATION NUMBER: 09/301,520
PRIOR PILING DATE: 1999-04-28
PRIOR FILING DATE: 1999-04-28
PRIOR PILING DATE: 1999-10-13
PRIOR PILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR APPLICATION NUMBER: 05/01/05/0685
PRIOR FILING DATE: 1995-10-23
PRIOR FILING DATE: 1994-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1994-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1993-01-12
NUMBER OF SEQ ID NOS: 28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 78.4
Best Local Similarity 83.1
Matches 15; Conservative
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Publication No. US20020127612A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn version 3.0
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TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
FILE REFERENCE: JHU1190-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE APPLICANT: LEE, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL
                COMPUTER: IBM PC POPARTIBLE
COMPUTER: IBM PC POS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/154,333
FILING DATE: 21-May-2002
CLASSIFICATION AUMBER: US/09/389,705
PRIOR APPLICATION NUMBER: US/09/389,705
FILING DATE: 03-Sep-1999
APPLICATION NUMBER: 09/153,733
FILING DATE: CUNKNOWN
APPLICATION NUMBER: 09/153,733
FILING DATE: OUNTOWN
AFTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., JOHN R.
REGISTRATION NUMBER: 578
REFERENCE/DOCKET NUMBER: 678
REGISTRATION NUMBER: FD2279 PCT
TELECOMMUNICATION (619) 455-5100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AL INFORMATION:
APPLICANT: JOHNS HOPKINS UNIVERSITY
APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   75
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STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PDHVPKPCCAPTKLNAIS 92
TELEFAX: (619) 455-5110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: US
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83.3%;
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US-09-813-459-14
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FILE REFERENCE: JHU1190-7
CURRENT APPLICATION NUMBER: US/10/704,223
CURRENT FILING DATE: 2003-11-07
PRIOR APPLICATION NUMBER: US 10/115,406
PRIOR FILING DATE: 2002-04-02
PRIOR FILING DATE: 1990-04-28
PRIOR PPLICATION NUMBER: US 09/172,062
PRIOR PPLICATION NUMBER: US 09/172,062
PRIOR PPLICATION NUMBER: US 09/172,062
PRIOR PILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR FILING DATE: 1994-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR PILING DATE: 1993-01-12
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                                                                  Sequence 14, Application US/09813459
Patent No. US20020107369A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Homo sapiens
3-10-704-223-11
                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 11
LENGTH: 118
                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                          Matches
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APPLICANT: LEE, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION FOR SEQ ID NO: 13: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE DESCRIPTION: SEQ ID NO: 13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IMMEDIATE SOURCE
               Cunningham, No. US20020107369A1een
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-10
                                                    APPLICANT: Lee, Se-Jin
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                                                                                                                                                                                                  PDHVPKPCCAPTKLNAIS
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vo. US20040152143A1
OF SEQUENCES: 26
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83.3%;
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2; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.0006;
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NAME/KEY: Protein
LOCATION: 1..119
SEQUENCE DESCRIPTION: SEQ ID NO: 14:
US-09-813-459-14
PRIOR APPLICATION NUMBER: 09/019,070
PRIOR FILING DATE: 1998-02-05
PRIOR APPLICATION NUMBER: 08/62,445
PRIOR FILING DATE: 1997-05-23
PRIOR APPLICATION NUMBER: 08/947,910
PRIOR APPLICATION NUMBER: 08/947,910
PRIOR APPLICATION NUMBER: 08/795,071
PRIOR HILING DATE: 1997-02-05
PRIOR FILING DATE: 1995-10-26
PRIOR APPLICATION NUMBER: 08/525,596
PRIOR APPLICATION NUMBER: 08/705/94/03019
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                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 41, Application US/09859211 Patent No. US20020157125A1 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Wetherell, Jr., Ph.D., John REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: D-3054
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 455-5100
TELEPHONE: (619) 455-5110
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                  APPLICANT: Lee, Se-Jin
APPLICANT: McPherron, Alexandra C.
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
FILE REFERENCE: 07265/144001
CURRENT APPLICATION NUMBER: US/09/859,211
CURRENT FILING DATE: 2001-05-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/813,459
FILING DATE: 20-Mar-2001
CLASSIFICATION: «Unknown»
PRIOR APPLICATION UDMER: UNknown»
PRIOR APPLICATION UDMER: 08/624,635
PILING DATE: «Unknown»
APPLICATION UDMER: UB/624,635
PILING DATE: «Unknown»
ATTORNEY/ACENT INFORMATION:
NAME: Werthere11. Jr. Ph.D. John R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS: single TOPOLOGY: linear MOLECULE TYPE: protein INMEDIATE SOURCE: CLONE: BMP-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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STATE: California
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STREET: 1880 Century Park East, Suite 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PDHVPKPCCAPTKLNAIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 119 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 119;
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В
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US-09-880-708-19
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                                                                      Query Match
Best Local S
Matches 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 19, Application US/09880708 Patent No. US20020165361A1 GENERAL INFORMATION:
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SEQ ID NO 41
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Best Local :
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PRIOR FILING DATE: 1993-03-19
NUMBER OF SEQ ID NOS: 51
                                                                                                                                                                                                                                                                                  TELEFAX: 619/677-1465
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COmpatible
OPERATING SYSTEM: Windows 95
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/880,708
FILING DATE: 12-7un-2001
PRIOR APPLICATION NUMBER: 09/145,060
FILING DATE: CURROWN
APPLICATION NUMBER: 09/145,060
FILING DATE: CURROWN
APPLICATION NUMBER: 09/145,060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                           TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 08/003,144
FILING DATE: 12-JAN-1993
ATTORNEY/AGENT INFORMATION:
NAME: Lise A. Haile, Ph.D.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07265/057002
                                                                                                                                                           SEQUENCE DESCRIPTION: SEQ ID NO: 19:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
ADDRESSEE: Gray Cary Ware & Freidenrich LLP
STREET: 4365 Executive Drive, Suite 1600
                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
TELEPHONE: 858/677-1456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-5 NUMBER OF SEQUENCES: 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Lee, Se-Jin
 76
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                                                                                       Similarity
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15; Conserv
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FastSEQ for Windows Version 4.0
PDHVPKPCCAPTKLNAIS 93
                                PETYPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                TYPE: amino acid
                                                                                                                                                                               CLONE:
                                                                                                                                                                                                                                                               LENGTH: 119 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TY: San Diego
                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                   78.4%;
83.3%;
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83.3%;
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                                                                                     Score 87; DB 9;
Pred. No. 0.0006;
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Pred. No. 0.0006;
                                                                  Mismatches
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                                                                                                    DB 9; Length 119;
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                                                                    Indels
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US-10-335-483-23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT FILING DATE: 2001-06-01
PRIOR APPLICATION NUMBER: US 09/124,180
PRIOR APPLICATION NUMBER: US 09/019,070
PRIOR FILING DATE: 1998-07-28
PRIOR PPLICATION NUMBER: US 09/019,070
PRIOR PPLICATION NUMBER: US 08/862,445
PRIOR APPLICATION NUMBER: US 08/862,445
PRIOR APPLICATION NUMBER: US 08/867,910
PRIOR APPLICATION NUMBER: US 08/95,071
PRIOR PILING DATE: 1997-04-28
PRIOR PILING DATE: 1997-02-05
PRIOR APPLICATION NUMBER: US 08/795,071
PRIOR PILING DATE: 1997-02-05
PRIOR APPLICATION NUMBER: US 08/525,596
PRIOR APPLICATION NUMBER: US 08/525,596
PRIOR APPLICATION NUMBER: US 08/525,596
PRIOR APPLICATION NUMBER: PCT/US 94/03019
PRIOR FILING DATE: 1994-03-18
PRIOR FILING DATE: 1994-03-18
PRIOR FILING DATE: 1994-03-18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 23, Application US/10335483 Publication No. US20030120058A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Johns Hopkins University School of Medicine APPLICANT: Johns Hopkins University School of Medicine APPLICANT: McPherron, Alexandra
TITLE OF INVENTION: Growth Differentiation Factor-8
FILE REFERENCE: JHU1120-17
CURRENT APPLICATION NUMBER: US/09/872,856
CURRENT FILING DATE: 2001-06-01
PRIOR APPLICATION NUMBER: US 09/124,180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: P
SEQ ID NO 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: US 08/033,923 PRIOR FILING DATE: 1993-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENGTH: 119
          COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FASESEQ for Windows Versic
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/10/335,483
FILING DATE: 31-Dec-2002
CLASSIFICATION: CURROWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                       Lee, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-8
NUMBER OF SEQUENCES: 32
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     76
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PDHVPKPCCAPTKLNAIS
                                                                                                                                                                                                                                                                                  CITY: La Jolla
STATE: CA
                                                                                                                                                                                                                                     COUNTRY: US
ZIP: 92037
                                                                                                                                                                                                                                                                                                                        STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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                                                                                                                 Version
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                           SEQ ID NO 41
                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/463,973
CURRENT FILING DATE: 2003-06-17
CURRENT PRIOR APPLICATION NUMBER: US/09/872,856
PRIOR FILING DATE: 2001-06-01
PRIOR APPLICATION NUMBER: US 09/124,180
PRIOR FILING DATE: 1998-07-28
PRIOR FILING DATE: 1998-07-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: McPherron, Alexandra
TITLE OF INVENTION: Growth Differentiation
FILE REFERENCE: JHU1120-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 619-678-5099
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PPLICANT: Johns Hopkins University School of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ENERAL INFORMATION:
ORGANISM: Homo sapiens
                                                                                                                                                          APPLICATION NUMBER: US 08/795,071
FILING DATE: 1997-02-05
APPLICATION NUMBER: US 08/525,596
FILING DATE: 1995-10-25
APPLICATION NUMBER: PCT/US 94/03019
FILING DATE: 1994-03-18
                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 09/019,070 FILING DATE: 1998-02-05 APPLICATION NUMBER: US 08/862,445 FILING DATE: 1997-05-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/09/177,860
FILING DATE: <UNKNOWN:
APPLICATION NUMBER: 08/525,596
FILING DATE: 19-SEP-1995
APPLICATION NUMBER: PCT/US94/07762
FILING DATE: 08-UUL-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
TELEPHONE: 619-678-5070
                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 08/847,910 FILING DATE: 1997-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                      APPLICATION NUMBER: US 08/033,923 FILING DATE: 1993-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              76
                                                                                 PatentIn version 3.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Wetherell, Jr., Ph.D, John R. REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: 07265/075001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLONE: BMP-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application US/10463973
vo. US20040055027A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
                                                                                                     ID NOS:
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1..119
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83.3%;
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0.0006;
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, NAME/KEY: Protein
; LOCATION: 1..119
; SEQUENCE DESCRIPTION: SEQ ID NO: 13:
US-10-693-536-13
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US-10-693-536-13
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                                                             Matches
                                                                             Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 13: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION CUNKNOWN>
PRIOR APPLICATION UNMEER: US/09/619,061
APPLICATION NUMBER: US/09/097,616
FILING DATE: 15-Jun-1996
FILING DATE: 15-Jun-1996
APPLICATION NUMBER: US 08/581,529
FILING DATE: 15-APR-1996
ATTORNEY/AGENT INFORMATION:
NAME: Lisa A. Haile, Ph.D.
REGERENCE/DOCKET NUMBER: 07265/082001
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-6 NUMBER OF SEQUENCES: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Lee, Se-Jin
                                                                                                                                                                                                                        TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15;
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76
                             3 PETYPKPCCAPTQLNAIS 20
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                                                                             Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: La Jolla
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 4225 Executive Square, Suite 1400
                                                                                                                                                                                                                                                                    TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
PDHVPKPCCAPTKLNAIS 93
                                                                                                                                                                                                        CLONE: BMP-5
                                                                                                                                                                                                                                                                                                       LENGTH: 119 amino acids
                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: (619)
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                                                             Conservative
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83.3%;
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; pred. No. (
2; Mismatch
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                                                             2:
                                                                             Score 87; I
Pred. No. 0.
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                                                               Mismatches
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                                                                             DB 15; Length 119; 0.0006;
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                                                                 Indels
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RESULT 156
US-10-122-026-18
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; ORGANISM: Homo sapiens
US-10-366-345-61
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US-10-758-210-13
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SOFTWARE: Pater
; SEQ ID NO 13
*FNGTH: 119
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CURRENT APPLICATION NUMBER: US/10/758,210
CURRENT FILING DATE: 2004-01-14
PRIOR APPLICATION NUMBER: US/09/412,791D
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: US/09/412,791D
PRIOR FILING DATE: 1996-01-09
PRIOR FILING DATE: 1996-01-09
PRIOR FILING DATE: 1996-01-09
PRIOR FILING DATE: 1994-07-08
PRIOR FILING DATE: 1994-07-08
PRIOR FILING DATE: 1994-07-08
PRIOR FILING DATE: 1994-07-08
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Best Local S
Matches 15
                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: PT189
CURRENT APPLICATION UMBER: US/10/366,345
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 77
SOFTWARE: Patentin version 3.2
SEQ ID NO 61
LENGTH: 138
                                                                                                           Sequence 18, Application US/10122026 Publication No. US20030105004A1
                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Young, et al.
TITLE OF INVENTION: Bone Morphogenetic Protein Polynucleotides, Polypeptides
TITLE OF INVENTION: Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:

APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE APPLICANT: LEE, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 61, Application US/10366345
Publication No. US20030224501A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 13, Application US/10758210 Publication No. US20040127696A1
                                                                                        GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: HUYNH, Thanh
TITLE OF INVENTION: ANTIBODIES BINDING TO GROWTH DIFFERENTIATION FACTOR-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                  Local
                                                                      APPLICANT:
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                                                                                                                                                                                                                                                         3 PETVPKPCCAPTQLNAIS 20
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15; Conserv
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                                                                                                                                                                                                                                                                                                                  Similarity
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                                                                                                                                                                                                                       PDHVPKPCCAPTKLNAIS 112
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                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                 JONES, WILLIAM K
TUCKER, RONALD F
RUEGER, DAVID C
OPPERMANN, HERMANN
OZKAYNAK, ENGIN
                                                                                                                                                                                                                                                                                                                78.4%;
83.3%;
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Pred. No.
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                                                                  Query Match
Best Local Similarity
Matches 15; Conserv
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REGISTRATION NUMBER: 43,526
REFERENCE/JOCKET NUMBER: STK-060CN
INFORMATION FOR SEQ ID NO: 18:
                                                                                                                                                                                                                                                                                            LOCATION: 1..453
OTHER INFORMATION:
PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 07/667,274 FILING DATE: 11-MAR-1991 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/122,026
                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
410 PDHVPKPCCAPTKLNAIS
                                   PETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                        JOURNAL:
                                                                                                                                                                                                                                                                       AUTHORS:
                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Patent Administrator,
Thibeault, LLP
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                        NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 08/402,542 FILING DATE: 13-MAR-1995 APPLICATION NUMBER: US 08/840,510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 29-Aug-2002 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 453 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 07/923,780 FILING DATE: 31-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/971,091 FILING DATE: 03-NOV-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 31-MAR-1993
APPLICATION NUMBER: US 08/029,335
FILING DATE: 04-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: MA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PELICATION NUMBER: US 07/752,857
TILING DATE: 30-AUG-1991
PELICATION NUMBER: US 07/752,764
TLING DATE: 30-AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PPLICATION NUMBER: US 07/946,235
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                                                                             Conservative
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Proc. Natl. Acad. Sci. U.S.A.
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427
                                                                           2; Mismatches
                                                                                           Score 87;
Pred. No.
                                                                                                                                                                                                                                                                                                                 /note= "PRE-PRO-BMP5 (HUMAN)"
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US-10-164-279-29
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US-10-286-152A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Homo sapiens US-10-164-279-29
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                Sequence 37, Application US/10366345
Publication No. US20030224501A1
GENERAL INFORMATION:
APPLICANT: Young, et al.
TITLE OF INVENTION: Bone Morphogenetic Protein Polynucleotides, Polypeptides and TITLE OF INVENTION: Antibodies
FILE REFERENCE: PT189 CURRENT APPLICATION NUMBER: US/10/366,345
CURRENT FILING DATE: 2003-02-14
NUMBER OF SEQ ID NOS: 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/164,279
CURRENT FILING DATE: 2002-06-06
PRIOR APPLICATION UMBER: 09/791946
PRIOR FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 64
SOPTWARE: Patentin version 3.1
SEQ ID NO 29
TENEMEN AS
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Publication No. US20030185792A1
GENERAL INFORMATION:
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LENGTH: 454
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Best Local (
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APPLICANT: Clark, Abbot F.
APPLICANT: Clark, Abbot F.
TITLE OF INVENTION: Bone Morphogenic Proteins (BMP), BMP Receptors and BMP Binding Pr
TITLE OF INVENTION: and Their Use in the Diagnosis and Treatment of Glaucoma
FILE REFERENCE: 2312 US
CURRENT APPLICATION NUMBER: US/10/286,152A
CURRENT FILING DATE: 2002-02-28
NUMBER OF SEC ID NOS: 54
                                                                                                                                                                                                                   -10-366-345-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Keck, P.
TITLE OF INVENTION: MORPHOGEN ANALOGS OF BOND MORPHOGENIC PROTEINS
FILE REFERENCE: CIBT-P04-566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 454
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
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Similarity 83.3%;
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83.3%;
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Pred. No. 0.0022;
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; Sequence 28, Application US/09813398 ; Patent No. US20020169292A1 ; GENERAL INFORMATION:
                                                                  US-09-813-398-28
                                                                                     RESULT 161
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Homo sapiens US-10-366-345-37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 37
LENGTH: 45
                                                             Query Match
Best Local Similarity
Matches 15; Conserva
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                                                                                                                                                                                                                                 TELEFAX: 617-876-5851 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
ZIP: 02140-2387
COMPUTER READABLE FORM:
MEDIUM TYPE: Tage
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPUTER: PC-DOS/MS-D
OPERATING SYSTEM: PC-DOS/MS-D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Israel, David
APPLICANT: Israel, David
APPLICANT: Wolfman, Neil M.
APPLICANT: Wolfman, Neil M.
TITLE OF INVENTION: Recombinant Bone Morphogenetic Protein
TITLE OF INVENTION: Heterodimers, Compositions and Methods of Use.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS:
ADDRESSE: Legal Affairs, Genetics Institute, Inc
STREET: 87 CambridgePark Drive
                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 454 amino acids
                                                                                                                                                                                                                                                                            NAME: Kapinos, Ellen J.
REGISTRATION NUMBER: 32,245
REFERENCE/DOCKET NUMBER: GI-5192B
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA: APPLICATION NUMBER: US/10/375,15
                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 6, Cambridge
                                                                                                                                                              TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE
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411 PDHVPKPCCAPTKLNAIS
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1 Similarity 83.3%;
15; Conservation
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                             PETVPKPCCAPTQLNAIS 20
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No. US20030235888A1
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                                                                 Conservative
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                                                                                                                                              protein
                                                                             78.4%;
83.3%;
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Pred. No. 0.0022;
2; Mismatches
                                                             Score 87; DB 14;
Pred. No. 0.0022;
2; Mismatches
 428
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PPLICANT: Bruce D. Weintraub PPLICANT: Mariusz W. Szkudl

Szkudlinski

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US-09-754-831A-15
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Best Local Similarity
Matches 15; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 28
; LENGTH: 455
; TYPE: PRT
; ORGANISM: HOMO SAPIEN
US-09-813-398-28
                                                                                                                                        ; FEATURE: ; OTHER INFORMATION: Biosynthetic COP4 protein with osteogenic activity US-09-754-831A-15
                                                                        Matches
                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                 SOFTWARE: PatentIn version 3.0 SEQ ID NO 15 LENGTH: 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15, Application US/09754831A Publication No. US20030228345A1
                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 08/145,812
PRIOR FILING DATE: 1993-11-01
PRIOR APPLICATION NUMBER: US 07/995,345
PRIOR FILING DATE: 1992-12-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/813,398
CURRENT FILING DATE: 2001-03-20
PRIOR APPLICATION NUMBER: PCT/US99/05908
PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: PCT/US98/19772
PRIOR FILING DATE: 1998-09-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US 08/375,901 PRIOR FILING DATE: 1995-01-20
                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 72
                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 07/315,342 PRIOR FILING DATE: 1989-02-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Oppermann, Herman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS:
                                                                                                                                                                          TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TLE OF INVENTION: Osteogenic Devices
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE: STK-008CN
ENT APPLICATION NUMBER: US/09/754,831A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CANT: University of Maryland OF INVENTION: CYSTINE KNOT GROWTH FACTOR MUTANTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            412 PDHVPKPCCAPTKLNAIS 429
                                                                                                                                                                                                                                                                                                                        LING DATE: 1988-08-15
PLICATION NUMBER: US 07/179,406
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                                                                                                                                                                                                                                                                                                         LING DATE:
                                1 INPETYPECCAPTQLNAIS 20
 MNPGKVPKPCCVPTELSAIS 71
                                                                                                                                                                                                                                                                                                                                                         CATION NUMBER: US 07/232,630
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rueger, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kuberasampath,
                                                                        Conservative
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83.3%;
                                                                                     74.8%;
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                                                                      Mismatches
                                                                                       Score 83; 1
Pred. No. 0
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Pred. No. 0
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                                                                                       DB 10;
0.0017;
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                                                                                                      Length 97;
                                                                        Indels
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RESULT 163

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RESULT 164
US-09-754-831A-13
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PRIOR APPLICATION NUMBER: US 08/375,901
PRIOR PILING DATE: 1995-01-20
PRIOR APPLICATION NUMBER: US 08/145,812
PRIOR PILING DATE: 1993-11-01
PRIOR FILING DATE: 1993-11-01
PRIOR APPLICATION NUMBER: US 07/995,345
PRIOR FILING DATE: 1992-12-22
PRIOR FILING DATE: 1989-02-23

PRIOR FILING DATE: 1989-02-23
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                                                                                                                                                                          CURRENT FILING DATE: 2001-01-03
PRIOR APPLICATION NUMBER: US 08/375,901
PRIOR FILING DATE: 1995-01-20
PRIOR FILING DATE: 1995-01-20
PRIOR FILING DATE: 1993-11-01
PRIOR APPLICATION NUMBER: US 07/995,345
PRIOR APPLICATION NUMBER: US 07/315,342
PRIOR APPLICATION NUMBER: US 07/315,342
PRIOR FILING DATE: 1989-02-23
PRIOR FILING DATE: 1989-02-23
SOFTWARE: Pa
SEQ ID NO 13
LENGTH: 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Pa
SEQ ID NO 16
LENGTH: 97
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Best Local Similarity
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                                                              PRIOR APPLICATION NUMBER: US 07/232,630
PRIOR FILING DATE: 1988-08-15
PRIOR APPLICATION NUMBER: US 07/179,406
PRIOR FILING DATE: 1988-04-08
NUMBER OF SEQ ID NOS: 72
                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: STK-008CN
CURRENT APPLICATION NUMBER: US/09/754,831A
CURRENT FILING DATE: 2001-01-03
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PRIOR APPLICATION NUMBER: US 07/179,406
PRIOR FILING DATE: 1988-04-08
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APPLICANT: Kuberasampath, T
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CURRENT APPLICATION NUMBER: US/09/754,831A
CURRENT FILING DATE: 2001-01-03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Ozkaynak, Engin
TITLE OF INVENTION: Osteogenic Devices
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RIOR APPLICATION NUMBER: US 07/232,630
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION
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Rueger, David
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Pred. No. 0.0017;
3; Mismatches 3
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Gaps

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activity

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GENERAL INFORMATION:
APPLICANT: Oppermann, Herman
APPLICANT: Ruberasampath, Thangavel
APPLICANT: Rueger, David
APPLICANT: Rueger, David
APPLICANT: Ozkaynak, Engin
TITLE OF INVENTION: Osteogenic Devices
FILE REFERENCE: STK-008CN
CURRENT APPLICATION NUMBER: US/09/754,831A
CURRENT FILING DATE: 2001-01-03
PRIOR APPLICATION NUMBER: US 08/375,901
PRIOR FILING DATE: 1995-01-20
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US-09-754-831A-14
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US-09-754-831A-44
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US-09-754-831A-14
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CURRENT FILING DATE: 2001-01-03
PRIOR APPLICATION NUMBER: US 08/375,901
PRIOR FILING DATE: 1995-01-20
PRIOR ETLING DATE: 1993-11-01
PRIOR ETLING DATE: 1993-11-01
PRIOR ETLING DATE: 1993-11-01
PRIOR PPLICATION NUMBER: US 07/95,345
PRIOR ETLING DATE: 1992-12-22
PRIOR ETLING DATE: 1992-02-23
PRIOR ETLING DATE: 1990-02-23
PRIOR ETLING DATE: 1980-08-13
PRIOR ETLING DATE: 1988-08-15
PRIOR APPLICATION NUMBER: US 07/232,630
PRIOR PHILING DATE: 1988-08-15
PRIOR APPLICATION NUMBER: US 07/179,406
PRIOR ETLING DATE: 1988-08-15
PRIOR PHILING DATE: 1988-08-16
PRIOR PHILING DATE: 1988-08-16
PRIOR FILING DATE: 1988-08-05
PRIOR FILI
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Best Local Similarity 70.0%;
Matches 14; Conservative
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SOFTWARE: PatentIn version 3.0
SEQ ID NO 14
LENGTH: 98
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APPLICANT: Kuberasampath, Thangavel
APPLICANT: Rueger, David
APPLICANT: Ozkaynak, Engin
TITLE OF INVENTION: Osteogenic Devices
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14; Conservative
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vo. US20030228345A1
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Pred. No. 0.0017;
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PRIOR APPLICATION NUMBER: US 08/145,812
PRIOR FILING DATE: 1993-11-01
PRIOR FILING DATE: 1993-12-22
PRIOR FILING DATE: 1992-12-22
PRIOR PELLING DATE: 1992-12-22
PRIOR APPLICATION NUMBER: US 07/315,342
PRIOR APPLICATION NUMBER: US 07/315,342
PRIOR APPLICATION NUMBER: US 07/232,630
PRIOR PILING DATE: 1988-08-15
PRIOR PRIOR DATE: 1988-08-15
PRIOR FILING DATE: 1988-04-08
NUMBER OF SEQ ID NOS: 72
SOPTWARE: PATENTIN Version 3.0
SEQ ID NO 44
LENGTH: 102
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 8
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Tanihara , Masao
TITLE OF INVENTION: A Peptide and Osteogenetic Accelerator
FILE REFERENCE: 81918-0001
CURRENT APPLICATION NUMBER: US/10/619,910
CURRENT FILLING DATE: 2003-07-15
CURRENT FILLING DATE: 2003-07-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US/09/439,779B PRIOR FILING DATE: 2001-09-10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 20
TYPE: PRT
ORGANISM: Artificial Sequence
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NAME/KEY: MISC_FEATURE
(12)
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NAME/KEY: MISC_FEATURE
LOCATION: (6)...(6)
OTHER INFORMATION: Xaa=Ile or Val
                                                                                                                                                                                                                                                                                                                                           NAME/KEY: MISC_FEATURE
LOCATION: (5)...(5)
OTHER INFORMATION: Xaa=Lys,
                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE: OTHER INFORMATION: Synthesized peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
LOCATION: (17)..(17)
OTHER INFORMATION: Xaa=Ser or Asn
                               FEATURE:
NAME/KEY: MISC_FEATURE
                                                                                 LOCATION: (12)..(12)
OTHER INFORMATION: Xaa=Ala
                                                                                                                                                                     LOCATION: (9). (9)
OTHER INFORMATION: Xaa=Ala
                                                                                                                                                                                                              NAME/KEY: MISC_FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         57 MNPGKVPKPCCVPTELSAIS 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 INPETVPKPCCAPTQLNAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          74.8%; Score 83; DB 10; 70.0%; Pred. No. 0.0017; tive 3; Mismatches
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                                                                                                                                                                                                                                                                                                                                             Ser or Thr
                                                                                        Val
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; Sequence 9, Application US/10187394
; Publication No. US20030176667A1
; GENERAL INFORMATION:
; APPLICANT: KECK, PETER
; APPLICANT: KHECK, PETER
; APPLICANT: SMART, JOHN
; TITLE OF INVENTION: SUPERFAMILY ()
                                                                                                                                                                                                                                   Ś
                                                                                                                            RESULT 169
US-10-187-394-9
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US-10-619-910-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 11
SOFTWARE: PatentIn version 3.1
SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 4, Application US/10619910 Publication No. US20040053844A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                         Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                                            Best
                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Tanihara , Masao
TITLE OF INVENTION: A Peptide and Osteogenetic Accelerator
FILE REFERENCE: 81918-0001
CURRENT APPLICATION NUMBER: US/10/619,910
CURRENT FILING DATE: 2003-07-15
CURRENT FILING DATE: 2003-07-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Kyocera Corporation APPLICANT: Nishimura, Yoshihiko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT FILING DATE: 2003-07-15
PRIOR APPLICATION NUMBER: US/09/439,779B
PRIOR FILING DATE: 2001-09-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: MISC FEATURE
LOCATION: (19)..(19)
OTHER INFORMATION: Xaa= Ser or Asn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: MISC_FEATURE
LOCATION: (7)..(7)
OTHER INFORMATION: Xaa=Lys,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Xaa=Ala
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: MISC_FEATURE LOCATION: (8)..(8)
OTHER INFORMATION: Xaa=Ile
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: Synthesized peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: MISC_FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OCATION: (11)..(11)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            THER INFORMATION: Xaa=Ala or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ENGTH: 22
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                                                                                                                                                                                                                                                                                          Local
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                                                                                                                                                                                                                                                                       13; Conservative
                                                                                                                                                                                                                                   INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INPETVEKECCAPTOLNAIS 20
                                                                                                                                                                                                  VNPEXXPKXCCXPTZLXAIS 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INPEXXEXXCCXPTZLXAIS 20
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Suzuki, Yoshihisa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
 SINGLE CHAIN ANALOGS OF TGF-B SUPERFAMILY (MORPHONS)
                                                                                                                                                                                                                                                                                        70.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    71.2%;
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Pred. No. 0.0012;
1; Mismatches 5
                                                                                                                                                                                                                                                                       2;
                                                                                                                                                                                                                                                                       Score 78; DB 15;
Pred. No. 0.0018;
2; Mismatches
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US-09-389-705-14
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                                                                                                                                                                                                                                                                     Sequence 14, Application US/09389705
Publication No. US20010018509A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: 617-248-7100
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 102 amino acid
                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: JOHNS HOPKINS UNIVERSITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 28-JUNE-2
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 02-FEB-20
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: TAM PC COMPATIBLE
COPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/187,394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUDD R
REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: STI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZIP: 02110
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR; TESTA, HURWITZ
ADDRESSEE: THISHEAULT, LLP
STREET: 125 HIGH STREET
CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: 617-248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: Protein LOCATION: 1..102 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 08/478,097 FILING DATE: 07-JUN-1995 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
STRANDEDNESS: sir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: U
ZIP: 02110
COUNTRY: US
ZIF: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: SPENSLEY HORN JUBAS :
STREET: 1880 CENTURY PARK EAST,
CITY: LOS ANGELES
STATE: CALIFORNIA
                                                                                                                                                                                                  TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3 NUMBER OF SEQUENCES: 29
                                                                                                                                                                                                                                                                                                                                                                                  57 LEPKKVPKPCCAPTRIGAL 75
                                                                                                                                                                                                                                                                                                                                                                                                        1 INPETVPKPCCAPTQLNAI 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         102 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      69.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "60A SEQUENCE"
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Pred. No. 0.011;
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Length 102; Indels

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Gaps

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                                                                                                                                  ; TYPE: PRT ; ORGANISM: Drosophila melanogaster US-10-115-406-12
                                                                                                                                                                                                                                                             CURRENT FILING DATE: 1999-04-02
PRIOR APPLICATION NUMBER: US/10/115,406
CURRENT FILING DATE: 2002-04-02
PRIOR APPLICATION NUMBER: 09/301,520
PRIOR ELING DATE: 1999-04-28
PRIOR APPLICATION NUMBER: US 09/172,062
PRIOR FILING DATE: 1999-10-13
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR FILING DATE: 1995-10-23
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1994-01-12
PRIOR APPLICATION NUMBER: US 08/003,303
PRIOR FILING DATE: 1993-01-12
NUMBER OF SEQ ID NOS: 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-389-705-14
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Best Local Similarity 63.2%;
Matches 12; Conservative
                                                                                                                                                                                             SOFTWARE: PatentIn version 3.0
SEQ ID NO 12
LENGTH: 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 12, Application US/10115406 Publication No. US20020127612A1
                                                                Query Match
Best Local Similarity
                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: LEE, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
FILE REFERENCE: JHU1190-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ENERAL INFORMATION:

APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
APPLICANT: LEE, Se-Jin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: 14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: WETHERELL, JR. Ph.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD2279 PCT
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 118 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/389,705
FILING DATE: 03-Sep-1999
CLASSIFICATION: «Unknown»
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 1..118
SEQUENCE DESCRIPTION: SEQ ID NO: 14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS: single TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73 LEPKKVPKPCCAPTRLGAL 91
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: (619)
INPETVPKPCCAPTQLNAI 19
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                                               Conservative
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                                                                63.2%;
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                                          ; Score 77; DB
; Pred. No. 0.01
4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 77; DB 9; Pred. No. 0.012;
                                                                                     DB 13; Length 118;
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                                               Indels
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US-10-154-333-14
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                                                                                                                                         RESULT 173
US-10-704-223-12
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Sequence 12. Application US/10704223
Publication No. US20040152143A1
GENERAL INFORMATION:
APPLICANT: THE JOHNS HOPKINS UNIVERSITY
APPLICANT: LEE, Se-Jin
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-9
FILE REFERENCE: JHU1190-7
                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 14, App
Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 14: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/09/389,705
FILING DATE: 03-Sep-1999
APPLICATION NUMBER: 09/153,733
FILING DATE: «Unknown»
ATTORNEY/AGENT INFORMATION:
NAVE: WETHERELL, JR. Ph.D., JOHN R.
REGISTRATION NUMBER: 31,678
REFERENCE/DOCKET NUMBER: FD2279 PCT
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/154,333
FILING DATE: 21-May-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
FILING DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 90067
COMPUTER READABLE FORM:
MEDIUM TYPE: Flopp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     UAL INFORMATION:
APPLICANT: JOHNS HOPKINS UNIVERSITY
TITLE OF INVENTION: GROWTH DIFFERENTIATION FACTOR-3
NUMBER OF SEQUENCES: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear MOLECULE TYPE: protein IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                              73 LEPKKVPKPCCAPTRLGAL 91
                                                                                                                                                                                                                                                                   1 INPETYPKPCCAPTQLNAI 19
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LEPKKVPKPCCAPTRLGAL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: SPENSLEY HORN JUBAS & LUBITZ
STREET: 1880 CENTURY PARK EAST, FIFTH FLOOR
CITY: LOS ANGELES
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 118 amino acids TYPE: amino acid
                                                                                                    Application US/10704223
No. US20040152143A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLONE: 60A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (619)
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; ORGANISM: Drosophila melanogaster
US-10-704-223-12
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PRIOR FILING DATE: 2002-04-02
PRIOR PPLICATION NUMBER: US 09/301,520
PRIOR PILING DATE: 1999-04-28
PRIOR APPLICATION NUMBER: US 09/172,062
PRIOR PLING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR APPLICATION NUMBER: US 08/491,835
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR APPLICATION NUMBER: US 08/603 302
PRIOR APPLICATION NUMBER: PCT/US94/00685
PRIOR APPLICATION NUMBER: US 08/603 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 25, Application US/08260675
Publication No. US20030104993A1
GENERAL INFORMATION:
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Best Local
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TYPE: PRT
                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/260,675
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION UNDER: US 07/752,764
FILING DATE: 30-AUG-1991
                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: COHEN, CHARLES M
TITLE OF INVENTION: MORPHOGEN-INDUCED NERVE REGENERATION AND
TITLE OF INVENTION: REPAIR
NUMBER OF SEQUENCES: 33
                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/667,274
                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
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CITY: BOSTON
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                                                                                                                               FILING DATE:
                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                            CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
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12; Conserv
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OZKAYNAK, ENGIN
PANG, ROY HL
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KUBERASAMPATH, THANGAVEL
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Pred. No. 0
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RESULT 176
US-10-122-026-16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1995-05-02
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR FILING DATE: 1993-09-01
PRIOR APPLICATION NUMBER: 07/923,780
PRIOR FILING DATE: 1992-07-31
PRIOR FILING DATE: 1992-07-37
PRIOR FILING DATE: 1991-08-30
PRIOR APPLICATION NUMBER: 07/667,274
PRIOR APPLICATION NUMBER: 07/667,274
Sequence 16, Application US/10122026
Publication No. US20030105004A1
GENERAL INFORMATION:
APPLICANT: JONES, WILLIAM K
TUCKER, RONALD F
RUEGER, DAVID C
                                                                                                                                                                                                                                                                 Best Local Similarity 63.2%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: KUBETSAMPATH et al.
APPLICANT: KUBETSAMPATH et al.
TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS IN
TITLE OF INVENTION: METABOLIC BONE DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 25, Application US/09952318A Publication No. US20030224979A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT FILING DATE: 2001-09-13
PRIOR APPLICATION NUMBER: 09/170,936
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: 08/432,883
                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 33
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1991-03-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 455
TYPE: PRT
ORGANISM: Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 27,829
REFERENCE/DOCKET NUMBER: CRI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: PITCHER ESQ, EDMUN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
nes 12; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ENGTH:
                                                                                                                                                                                                 410 LEPKKVPKPCCAPTRLGAL 428
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amino acid
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                                                                                                                                                                                                                                                                                            Score 77; DB 10; Length 455; Pred. No. 0.044;
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OPPERMANN, HERMANN

OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAYEL
TITLE OF INVENTION: NOTEL MORPHOGENIC PROTEIN COMPOSITIONS

OF MATTER

CORRESPONDENCE ADDRESS: NUMBER OF SEQUENCES:

ADDRESSEE: Patent Administrator, Testa, Hurwitz & Thibeault, LLP

HIGH STREET

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Query Match 69.4%;
Best Local Similarity 63.2%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                       LOCATION: 1..455
OTHER INFORMATION:
PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: STK-060CN
NMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/402,542
FILING DATE: 13-VAR-1995
APPLICATION NUMBER: US 08/840,510
FILING DATE: 31-YAR-1993
                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                    SEQUENCE DESCRIPTION: SEQ ID NO: 16:
APPLICATION NUMBER: US 08/029/335
FILING DATE: 04-MAR-1993
APPLICATION NUMBER: US 07/971,091
FILING DATE: 03-NOV-1992
APPLICATION NUMBER: US 07/946,235
FILING DATE: 16-SEP-1992
APPLICATION NUMBER: US 07/938,336
FILING DATE: 28-AUG-1992
APPLICATION NUMBER: US 07/923,780
FILING DATE: 31-UU-1992
APPLICATION NUMBER: US 07/923,780
FILING DATE: 31-UU-1992
                                                                                                                                                                                                                                                  AUTHORS:
JOURNAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: CAMACHO, JENNIFER A. REGISTRATION NUMBER: 43,526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/10/122,026 FILING DATE: 29-Aug-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 07/752,857
FILING DATE: 30-AUG-1991
APPLICATION NUMBER: US 07/752,764
FILING DATE: 30-AUG-1991
APPLICATION NUMBER: US 07/667,274
FILING DATE: 11-MAR-1991
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ZIP: 02110
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                                                                                                                                                                                                                                                                                                                                                        NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 455 amino acids TYPE: amino acid
                                                                                                                                                                                                          PAGES:
                                                                                                                                                                                                                                                                                                                                                                                                                                          TRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAMACHO,
                                                                                                                                                                                            9214-9218
1991
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Proc. Natl. Acad. Sci. U.S.A.
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                                                                4.
                                                              Score 77; DB 14; Length 455; Pred. No. 0.044; 4; Mismatches 3; Indels
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                                                                Gaps
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US-10-619-910-7

GENERAL INFORMATION:

APPLICANT: Kyocera Corporation APPLICANT: Nishimura, Yoshihiko APPLICANT: Suzuki, Yoshihisa

Sequence 7, Application US/10619910 Publication No. US20040053844A1

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; MOLECULE TYPE: protein ; SEQUENCE DESCRIPTION: SEQ ID NO: US-10-050-050-25
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RESULT 178
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                                                                                                                                    Query Match
Best Local Similarity 63.2
Matches 12; Conservative
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                                                                                                                                                                                                                                                                                                                                                            INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/10/050,050
PILING DATE: 15-Jan-2002
CLASSIFICATION: <UNKnown>
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/08/461,113
PILING DATE: <UNKnown>
APPLICATION NUMBER: US 08/445,882
PILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:
NAME: FENTON Esq., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
TELEPHONE: (508) 435-9001
TELEPHONE: (508) 435-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE Floppy disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

COMPATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PACENTIN Release #1.0,

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                       MATION FOR SEQ ID NO: 25: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING PROLIFERATION OF EPITHELIAL CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                          410 LEPKKVPKPCCAPTRLGAL 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     410 LEPKKVPKPCCAPTRLGAL 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION:
                                                                                            INPETVPKPCCAPTQLNAI 19
                                                                                                                                                                                                                                                                                             LENGTH: 455 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: MA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
                                                                                                                                                                                                                                                                            TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (508)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: HOPKINTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/10050050
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PANG, ROY H.L.
OZKAYNAK, ENGIN
SMART, JOHN E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COHEN, CHARLES M.
CHARETTE, MARC F.
KUBERASAMPATH, THA
RUEGER, DAVID C.
                                                                                                                                                       69.4%;
                                                                                                                                                                                                                                                                                                                                                                               435-6951
                                                                                                                                      4; Mismatches
                                                                                                                                                           Score 77; DB 14
Pred. No. 0.044;
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                                                                                                                                                                                                                                                                                                                                                                                                                                          CRP-074DV
                                                                                                                                                                                                                                         25:
                                                                                                                                                                              DB 14;
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                                                                                                                                                                              Length 455;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-619-910-3
                                                                                                                                                                      PRIOR APPLICATION NUMBER: US/09/439,779B
PRIOR FILING DATE: 2001-09-10
NUMBER OF SEQ ID NOS: 11
SOFTWARE: Patentin version 3.1
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 11
SOFTWARE: PatentIn version 3.1
SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 3, Application US/10619910 Publication No. US20040053844A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Kyocera Corporation
APPLICANT: Nishimura, Yoshihiko
APPLICANT: Suzuki, Yoshihisa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Tanihara, Masso
TITLE OF INVENTION: A Peptide and Osteogenetic Accelerator
FILE REFERENCE: 81918-0001
CURRENT APPLICATION NUMBER: US/10/619,910
CURRENT FILING DATE: 2003-07-15
PRIOR APPLICATION NUMBER: US/09/439,779B
PRIOR APPLICATION NUMBER: US/09/439,779B
PRIOR FILING DATE: 2001-09-10
                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/619,910
CURRENT FILING DATE: 2003-07-15
                                                                                                                                                                                                                                                                                                               APPLICANT: Tanihara , Masao
TITLE OF INVENTION: A Peptide and Osteogenetic Accelerator
FILE REFERENCE: 81918-0001
                                                          FEATURE:
OTHER INFORMATION: Synthesized peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Artificial Sequence
OTHER INFORMATION: Xaa=Lys, Ser or Thr
                NAME/KEY: MISC FEATURE LOCATION: (7)...(7)
                                                                                                                ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: (12)...(12)
OTHER INFORMATION: Xaa=Ala or Val
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OTHER INFORMATION: Xaa=Lys,
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OTHER INFORMATION: Synthesized peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: MISC_FEATURE COCATION: (12)..(12)
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                                                                                                                                                          ENGTH: 21
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13; Conserv
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Pred. No.
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APPLICANT: Smithson, Glennda
TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
FILE REFERENCE: 21402-269
CURRENT APPLICATION NUMBER: US/10/074,978A
CURRENT FILING DATE: 2003-01-07
PRIOR APPLICATION NUMBER: 60/266,221
PRIOR FILING DATE: 2001-02-12
PRIOR APPLICATION NUMBER: 60/335,109
PRIOR FILING DATE: 2001-10-31
PRIOR FILING DATE: 2001-10-31
                                                                                                                                                                                APPLICANT
                                                                                                                                                                                                                                               APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: MISC FEATURE LOCATION: (19)...(19)
OTHER INFORMATION: Xaa=Ser or
                                                                                                                                                                                                                                                                              PPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PEATURE:
NAME/KEY: MISC_FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EATURE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: MISC_FEATURE LOCATION: (11)..(11)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: Xaa=Ala
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 63...
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 VNPEXXPXXCCXPTZLXAI 21
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                                                                                                                                                                                                                                                                                                                           Rastelli, Luca
Mezes, Peter S
Ellerman, Karen
Heyes, Melvin P
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Taupier Jr, Raymond J
Moore, No. US20040010119A1lle
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Guo, Xiaojia (Sas
Fernandes, Elma
                                                                                                                                               Millet, Isabelle
Peyman, John
                                                                                                                                                                                            Shenoy, Suresh
Edinger, Shlomit
Gunther, Erik
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Boldog, Ferenc
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Malyankar, Uriel N
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Blalock, Angela
                                                                                                                                                                                Stone, Dave
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Vernet, Corine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kekuda, Ramesh
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                                                                                                                                                                                                                                                                  kets, Richard A
                                                                                                                                                                                                                                                                                                                                                                                            Vladimir
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                                                                                                                                                                                                                                                                                                                                                                                                             Uriel M
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Pred. No.
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2001-08-14

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APPLICANT: Spaderna, Steven K
APPLICANT: Zerhusen, Steven K
ITILE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of
ITILE OF INVENTION: Using the Same
FILE REFERENCE: 21402-275
CURRENT APPLICATION NUMBER: US/10/080,334
CURRENT FILING DATE: 2002-02-21
PRIOR APPLICATION NUMBER: 60/270,523
PRIOR FILING DATE: 2001-02-21
PRIOR APPLICATION NUMBER: 60/322,712
PRIOR APPLICATION NUMBER: 60/322,712
PRIOR APPLICATION NUMBER: 60/321,980
PRIOR APPLICATION NUMBER: 60/311,980
PRIOR APPLICATION NUMBER: 60/311,980
PRIOR APPLICATION NUMBER: 60/330,307
PRIOR FILING DATE: 2001-08-13
PRIOR APPLICATION NUMBER: 60/330,307
PRIOR FILING DATE: 2001-10-18
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US-10-074-978A-301
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PRIOR FILING DATE: 2001-02-13
PRIOR APPLICATION NUMBER: 60/276,703
PRIOR APPLICATION NUMBER: 60/276,703
PRIOR FILING DATE: 2001-03-16
PRIOR APPLICATION NUMBER: 60/330,293
PRIOR PLING DATE: 2001-10-18
PRIOR APPLICATION NUMBER: 60/322,127
PRIOR APPLICATION NUMBER: 60/322,127
PRIOR APPLICATION NUMBER: 60/322,93
PRIOR APPLICATION NUMBER: 60/320,099
PRIOR FILING DATE: 2001-04-02
PRIOR APPLICATION NUMBER: 60/310,797
PRIOR APPLICATION NUMBER: 60/268,646
PRIOR APPLICATION NUMBER: 60/268,646
PRIOR FILING DATE: 2001-02-14
PRIOR FILING DATE: 2001-02-14
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LENGTH: 102
TYPE: PRT
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Best Local Similarity
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APPLICANT: Shimk
APPLICANT: Li,
APPLICANT: Sheno
APPLICANT: Kekud
APPLICANT: Syete
APPLICANT: Syete
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APPLICANT
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APPLICANT:
APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11; Conservative
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Baumgartner, Jason C.
Gerlach, Valerie
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Padigaru, Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Casman, Stacie J
Boldog, Ferenc L
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Vernet, Corine A. 1
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Kekuda, Ramesh
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shimkets, Richard A
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57.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Meera
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Pred. No.
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; SEQ ID NO 209
; LENGTH: 105
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-080-334-209
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
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APPLICANT:
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PRIOR FILING DATE: 2001-02-23
NUMBER OF SEQ ID NOS: 388
SOFTWARE: Patentin Ver. 2.1
                                                                                                                   APPLICANT:
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PRIOR TILING DATE: 2001-02-23
PRIOR APPLICATION NUMBER: 60/276,400
PRIOR FILING DATE: 2001-03-16
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OR APPLICATION NUMBER: 60/270,220
OR FILING DATE: 2001-02-21
OR APPLICATION NUMBER: 60/274,295
OR FILING DATE: 2001-03-08
OR APPLICATION NUMBER: 60/318,526
OR APPLICATION NUMBER: 60/286,548
OR APPLICATION NUMBER: 60/286,548
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DR APPLICATION NUMBER: 60/281,521

DR FILING DATE: 2001-04-04

DR APPLICATION NUMBER: 60/276,677

DR FILING DATE: 2001-03-16

DR APPLICATION NUMBER: 60/311,595
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APPLICATION NUMBER: 60/291,765
FILING DATE: 2001-05-17
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Miller, Charles E.
Gerlach, Valerie
Taupier Jr, Raymond Gusev, Vladimir Y.
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Spytek, Kimberly
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Grosse, William M.
Alsobrook II, John P
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Patturajan, Mee
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Anderson, David W.
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5. US20040033493A1
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NUMBER OF SEQ ID NOS: 1391
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 832
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APPLICANT: Tchernev, Velizar
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FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
                                                     APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
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FILING DATE: 2001-02-07
APPLICATION NUMBER: 60/267,459
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                                                                      Lepley, Denise M.
Rieger, Daniel K.
Burgess, Catherine E
                                                                                                                        Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P
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Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
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Shimkets, Richard
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Patturajan, Meera
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57.9%;
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Pred. No. 0.
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; OTHER INFORMATION: Description of Artificial Sequence: Transforming; OTHER INFORMATION: growth factor beta like domain US-10-072-012-834
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US-09-930-512-77
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APPLICANT: Zerhusen, Bryan D
APPLICANT: Padigaru, Muralic
APPLICANT: Spytcek, Kimberly
APPLICANT: Sprekek, Steven
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CURRENT APPLICATION NUMBER: US/09/930,512
CURRENT FILING DATE: 2001-08-15
PRIOR APPLICATION NUMBER: 60/225,692
PRIOR FILING DATE: 2000-08-16
                                                                 APPLICANT: MacDougall, John
TITLE OF INVENTION: No. US20040010118Alel Proteins and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-091
                                                                                                                             APPLICANT:
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PRIOR
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PRIOR FILING DATE: 2001-02-07
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ORGANISM: Artificial Sequence
FEATURE:
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FILING DATE: 2001-02-05
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FILING DATE: 2001-01-30
APPLICATION NUMBER: 60/265,514
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No. US20040010118A1
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Shimkets, Richard
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Gangolli, Esha A
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Stone, David
                                                                                                                                                               Ellerman, Karen
Smithson, Glennda
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57.9%;
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APPLICATION NUMBER: 60/225,837

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; ORGANISM: Homo sapiens
US-09-930-512-77
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SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 77
LENGTH: 102
TYPE: DDm
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Publication No.
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Best Local
APPLICANT: Zerhusen, Bryan D
TITLE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of
TITLE OF INVENTION: Using the Same
FILE REFERENCE: 21402-275
CURRENT FILLING DATE: 2002-02-21
PRIOR APPLICATION NUMBER: 60/270,523
PRIOR FILING DATE: 2001-02-21
PRIOR APPLICATION NUMBER: 60/322,712
PRIOR APPLICATION NUMBER: 60/322,712
PRIOR FILING DATE: 2001-09-17
PRIOR FILING DATE: 2001-09-17
PRIOR PAPPLICATION NUMBER: 60/311,980
PRIOR FILING DATE: 2001-08-13
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OR APPLICATION NUMBER: 60/227,085
OR FILING DATE: 2000-08-22
OR APPLICATION NUMBER: 60/227,395
OR FILING DATE: 2000-08-23
OR APPLICATION NUMBER: 60/227,492
OR FILING DATE: 2000-08-24
OR APPLICATION NUMBER: 60/227,600
OR FILING DATE: 2000-08-24
OR APPLICATION NUMBER: 60/275,952
OR APPLICATION NUMBER: 60/275,952
OR FILING DATE: 2001-03-14
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FILING DATE: 2000-08-18
APPLICATION NUMBER: 60/226,353
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APPLICATION NUMBER: 60/225,693
FILING DATE: 2000-08-16
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Baumgartner, Jason C.
Gerlach, Valerie
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Furtak, Katarzyna
Tchernev, Velizar T
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Vernet, Corine A. M.
Malyankar, Uriel M
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Padigaru, Muralidhara
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Kekuda, Ramesh
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Ferenc L
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55.0%;
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Pred. No. 0.048;
5; Mismatches
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US-10-074-978A-300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 388
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 300, Application US/10074978A Publication No. US20040010119A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 64.9
Best Local Similarity 55.0
Matches 11; Conservative
                                                                                                                                               APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DR APPLICATION NUMBER: 60/286,548
DR FILLING DATE: 2001-04-25
DR APPLICATION NUMBER: 60/291,765
DR FILLING DATE: 2001-05-17
DR APPLICATION NUMBER: 60/270,797
DR APPLICATION NUMBER: 60/270,797
DR FILLING DATE: 2001-02-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/270,220
FILING DATE: 2001-02-21
APPLICATION NUMBER: 60/274,295
FILING DATE: 2001-03-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/276,677
FILING DATE: 2001-03-16
APPLICATION NUMBER: 60/311,595
FILING DATE: 2001-08-10
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FILING DATE: 2001-10-18
APPLICATION NUMBER: 60/278,796
FILING DATE: 2001-03-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/276,400 FILING DATE: 2001-03-16 APPLICATION NUMBER: 60/270,810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/281,521 FILING DATE: 2001-04-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 60/318,526 FILING DATE: 2001-09-10
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Herrman, John
Pena, Carol E A
Shimkets, Richard A
Taupier Jr, Raymond J
Moore, No. US20040010119Allle
                                                                                                                                                               Tchernev, Velizar
Malyankar, Uriel N
Gusev, Vladimir
                                                                                                                                                                                                                                                                                                                                                                                     Spytek, Kimberly A
Guo, Xiaojia (Sasha)
Fernandes, Elma
                                                                                                                       Rastelli, Luca
Mezes, Peter S
                                                                                          Ellerman, Karen
Heyes, Melvin P
                                                                                                                                                                                                                                                                                               Casman, Stacie
Boldog, Ferenc
                                                                                                                                                                                                                        Ballinger, Robert
Vernet, Corine
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RESULT 187
US-10-072-012-831
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LENGTH: 102
TYPE: PRT
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Best Local S
Matches 11
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                                                                                                                                                                                                                                                                                                                                          Sequence 831, A Publication No.
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SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/335,109
PRIOR FILING DATE: 2001-10-31
PRIOR PPLICATION NUMBER: 60/312,284
PRIOR FILING DATE: 2001-08-14
PRIOR APPLICATION NUMBER: 60/268,496
PRIOR FILING DATE: 2001-02-13
PRIOR FILING DATE: 2001-02-13
                                                                                                                                                                                                                                                                              APPLICANT: Tchernev, Velizar APPLICANT: Spytek, Kimberly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/268,646 PRIOR FILING DATE: 2001-02-14
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PRIOR FILING DATE: 2001-08-08
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APPLICANT
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IITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
FILE REFERENCE: 21402-269
                                                                                                     APPLICANT
                                                                 APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Transforming
OTHER INFORMATION: growth factor beta like domain sequence
                                                                                                                          APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/280,899 FILING DATE: 2001-04-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/276,703 FILING DATE: 2001-03-16
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                                   Miller, Charles E.
Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shenoy, Suresh
Edinger, Shlomit
Gunther, Erik
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Peyman, John
                                                                                                                  Padigaru, Muralidhara
Anderson, David W.
Rastelli, Luca
                                                                                                                                                                                                                     Patturajan, Meera
Shimkets, Richard
                                                                                                                                                                                                                                                         Spytek, kimberi
Zerhusen, Bryan
    Wolenc, Adam R.
                                                                                                                                                                             Gangolli, Esha
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o. US20040033493A1
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                         Steven D.
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RESULT 188
US-10-072-012-833
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
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SEQ ID NO 831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
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PRIOR APPLICATION NUMBER: 60/266,767
PRIOR FILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR FILING DATE: 2001-02-07
PRIOR FILING DATE: 2001-02-07
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PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/266,406
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PRIOR FILING DATE: 2001-01-30
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PRIOR FILING DATE: 2001-02-07
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ORGANISM: Artificial Sequence
FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 55.0 es 11; Conservative
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Gerlach, Valeiro
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
Colman, Steven D.
                                                                                                                                                                                                                                                                                                                                                                                                                     LDPGAVPKPCCVPTKLSPLS
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Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lepley, Denise M.
Rieger, Daniel K.
                                                                               Anderson, David W.
Rastelli, Luca
Miller, Charles E.
                                                                                                                                      Padigaru, Muralidhara
                                                                                                                                                           Gangolli, Esha
                                                                                                                                                                                               Shimkets, Richard
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Pred. No. 0.048;
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Carol E. A

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Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 833
LENGTH: 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Remaining Prior Application data removed - See File Wrapper or PALM
NUMBER OF SEQ ID NOS: 1391
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                     equence 8, Application US/08260675 ublication No. US20030104993A1
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TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                         APPLICANT:
                                                                                                   CORRESPONDENCE
                                                                                                                                  APPLICANT: PANG, ROY HL
APPLICANT: COHEN, CHARLES M
ITTLE OF INVENTION: MORPHOG
ITTLE OF INVENTION: REPAIR
                                                                                                                                                                                                       PPLICANT:
                                    STREET: 55 ST
CITY: BOSTON
STATE: MA
STATE: MA
COUNTRY: USA
ZIP: 02140
                                                                                                                       MBER OF SEQUENCES:
                                                                                     ADDRESSEE:
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FINTION: Proteins and Nucleic Acids Encoding Same
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                                                                                                                                                                                     OPPERMANN, HERMANN
OZKAYNAK, ENGIN
PANG, ROY HL
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                                                                   STATE STREET
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                                                                                                                                                    CHARLES M
: MORPHOGEN-INDUCED NERVE REGENERATION AND
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55.0%;
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Pred. No. 0.048;
5; Mismatches 4
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                                                                                                                                                                  Sequence 8, Application US/09952318A
Publication No. US20030224979A1
GENERAL INFORMATION:
APPLICANT: Kubersampath et al.
TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF AND/OR INCREASE BONE MASS
TITLE OF INVENTION: METABOLIC BONE DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 617/248-7100 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                               FILE REFERENCE: JJJ-P06-522
CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT FILING DATE: 2001-09-13
PRIOR APPLICATION NUMBER: 09/170,936
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: 08/432,883
PRIOR FILING DATE: 1995-05-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FC-DOS/MS-DOS
COPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/126,100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 30-AUG-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: Protein
LOCATION: 1..139
OTHER INFORMATION: /label= MOP2-MATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US OFFILING DATE: 11-MAR-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IOR APPLICATION DATA: APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPOLOGY:
              APPLICATION NUMBER: 08/115,914 FILING DATE: 1993-09-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SSUE TYPE:
APPLICATION NUMBER: 07/923,780
                                                                                                                                                                                                                                                                                                                                                 : |: ||| |||||:|:| |
94 MKPDVVPKACCAPTKLSATS 113
                                                                                                                                                                                                                                                                                                                                                                              1 INPETVPKPCCAPTQLNAIS 20
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 139;
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US-10-050-050-8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn version 3.1
SEQ ID NO 8
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Best Local Similarity
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PRIOR APPLICATION NUMBER: 07/667,274
PRIOR FILING DATE: 1991-03-11
NUMBER OF SEQ ID NOS: 33
                                                                                                                                                                   TELEPHONE: (508) 435-90
TELEFAX: (508) 435-6951
INFORMATION FOR SEQ ID NO: /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 139
                                                                                                                                                                                                                            CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/461,113
PILING DATE: <Unknown>
APPLICATION NUMBER: US 08/445,882
PILING DATE: <Unknown>
APPLICATION NUMBER: US 08/445,882
PILING DATE: 22-MAY-1995
ATTORNEY/AGENT INFORMATION:
NAME: FENTON ESG., GILLIAN M.
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: 50,004
TELECOMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IRM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PACENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/050,050
FILING DATE: 15-Jan-2002
OTICINATION FILING DATE: 15-Jan-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SMART, JOHN E.
TITLE OF INVENTION: MORPHOGEN TREATMENT FOR LIMITING
PROLIFERATION OF EPITHELIAL CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: COMEN, CHARLES M.
CHARETEE, MARC F.
CHARETEE, MARC F.
CHAREASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 33 CORRESPONDENCE ADDRESS:
                                      MOLECULE TYPE: protein
                                                                                                                                               SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET CITY: HOPKINTON STATE: MA
                                                             TOPOLOGY: linear
                                                                                                    LENGTH: 139 amino acids
TYPE: amino acid
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 01748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPPERMANN, HERMANN PANG, ROY H.L. OZKAYNAK, ENGIN
Protein
                                                                                                                                                                                                              (508) 435-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             64.9%;
                                                                                                                                                                   /note= "MOP-2 (MATURE FORM)"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 72; DB 10;
Pred. No. 0.065;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EPITHELIAL CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4; Indels.
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Sequence 8, Application US/10385064

Publication No. US20040102373A1

GENERAL INFORMATION:
APPLICANT: Cohen, Charles M.
APPLICANT: Kuberasampath, Thangavel
APPLICANT: Muberasampath, Thangavel
APPLICANT: Oppermann, Hermann
APPLICANT: Rueger, David C.
TITLE OF INVENTION: Protein Induced Morphogenesis
FILE REFERENCE: CGM-2 DIV (00960-502 DIV)
CURRENT APPLICATION NUMBER: US/10/385,064
CURRENT FILING DATE: 2003-03-10
PRIOR APPLICATION NUMBER: US/09/464,206
PRIOR APPLICATION NUMBER: US/09/464,206
PRIOR APPLICATION NUMBER: 08/396,684
PRIOR FILING DATE: 1995-12-15
PRIOR FILING DATE: 1995-03-01

NUMBER OF SEQ ID NOS: 16
SOFTWARE: DaTentTn vo~ 20
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SEQUENCE DESCRIPTION: SEQ ID NO: US-10-050-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 193
US-08-957-425-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: tissue type embyro MOP2-MATURE US-10-385-064-8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOPTWARE: PatentIn Ver. 2.0
SEQ ID NO 8
LENGTH: 139
TYPE: PRT
ORGANISM: Murinae gen. sp.
                                                                                                                                                                                                                                                                                                                                                                           Sequence 27, Application US/08957425
Publication No. US20030069401A1
GENERAL INFORMATION:
APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 64.9
Best Local Similarity 60.0
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 64.9%;
Best Local Similarity 60.0%;
Matches 12; Conservative
COUNTRY: U.S.A.
ZIP: 02109
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM CC COMPATIBLE
OPERATING SYSTEM: PC_DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                    TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94 MKPDVVPKACCAPTKLSATS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94 MKPDVVPKACCAPTKLSATS 113
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                                                                                                                                                                                      ADDRESSEE: TESTA, HURWI
STREET: 53 STATE STREET
                                                                                                                                               CITY: BOSTON
STATE: MASSACHUSETTS
                                                                                                                                                                                                                                                                                                                            OPPEKUAN.,
OZKAYNAK, ENGIN
THANGAVEL
                                                                                                                                                                                                                                                                                                                 KUBERASAMPATH, T
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                                                                                                                                                                                                                                                                                           ROY H.L.
                                                                                                                                                                                                            HURWITZ & THIBEAULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 72; DB 16; Length 139; Pred. No. 0.065; Indels
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Pred. No. 0.065;
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      Version #1.25
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В
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                                                                                                                                                     RESULT 194
                                                                                                    Sequence 23, Ap
Publication No.
                                                                                                                                                                                                                                                                         Query Match
Best Local (
                                                                                                                                                                                                                                                          Matches
                                                                                                                                  -08-260-675-23
                                                                                         GENERAL INFORMATION:
                                          APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION
                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 232,630
FILING DATE: 15-AUG-1986
APPLICATION NUMBER: US 179,460
FILING DATE: 08-APR-1988
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                              MATION FOR SEQ ID NO: 27: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: TELECOMMUNICATION INFORMATION: 117/248-7000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
                                                                                                                                                                                              354 MKPDVVPKACCAPTKLSATS 373
                                                                                                                                                                                                                                                          12;
                                                                                                                                                                                                                   1 INPETVPKPCCAPTQLNAIS 20
                                                                                                                                                                                                                                                          Similarity 60.0
12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/957,425 FILING DATE: 24-Oct-1997 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER: 27,829
                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 399 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 617/248-7100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: PITCHER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 810,560 FILING DATE: 20-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION DATA:
APPLICATION NUMBER: US/08/447,570
FILING DATE: 21-FEB-1992
                                                                                                      Application US/08260675
No. US20030104993A1
             KUBERASAMPATH, THAN
OPPERMANN, HERMANN
OZKAYNAK, ENGIN
PANG, ROY HL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LING DATE: 17-OCT-1989
PLICATION NUMBER: US 315,342
LING DATE: 23-FEB-1989
                                                                         RUEGER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LICATION NUMBER: US 616,374
ING DATE: 21-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ICATION NUMBER: US 422,613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATION NUMBER: US 483,913
G DATE: 22-FEB-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATION NUMBER: US 579,865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATION NUMBER: US 599,543
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATION NUMBER:
CHARLES M
                                                                       DAVID C
                                                                                                                                                                                                                                                                         64.9%;
60.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EDMUND R.
                                                          THANGAVEL
                                                                                                                                                                                                                                                        Score 72; DB 8;
Pred. No. 0.18;
4; Mismatches
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                                                                                                                                                                                                                                                                                      Length 399;
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Best Local Similarity
Matches 12; Conserv
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PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: USA
ZIP: 02140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: BOSTON
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Sequence 23, Application US/09952318A
Publication No. US20030224979A1
GENERAL INFORMATION:
APPLICANT: KLDEATSAMPATH et al.
TITLE OF INVENTION: TREATMENT TO PREVENT LOSS OF TITLE OF INVENTION: METABOLIC BONE DISEASE FILE REFERENCE: JUL-P06-522
CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT APPLICATION NUMBER: US/09/952,318A
CURRENT FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: 09/170,936
PRIOR FILING DATE: 1998-10-13
PRIOR APPLICATION NUMBER: 08/132,883
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR APPLICATION NUMBER: 08/115,914
PRIOR FILING DATE: 1993-09-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; LENGTH: 399 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-260-675-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO:
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APPLICATION NUMBER: US 0'
FILING DATE: 11-MAR-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0'
APPLICATION NUMBER: US 0'
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TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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STREET: 55 STATE STREET
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R: 27,829
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MORPHOGEN-INDUCED NERVE REGENERATION
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Pred. No. 0.18
4; Mismatches
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18;
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                                                                                                                                                                                                               AND/OR INCREASE BONE MASS
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US-10-122-026-8
; Sequence 8, Application US/10122026
; Publication . US20030105004A1
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Best Local Similarity
Matches 12; Conserv
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SEQ ID NO 23
LENGTH: 399
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PRIOR APPLICATION NUMBER: 07/752,847
PRIOR FILING DATE: 1991-08-30
PRIOR APPLICATION NUMBER: 07/667,274
PRIOR FILING DATE: 1991-03-11
NUMBER OF SEQ ID NOS: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC Compatible
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve-
SOFTWARE: Patentin Release #1.0, Ve-
CURRENT APPLICATION DATA:

PRIOR APPLICATION: - CUNKNOWN>
PRIOR APPLICATION DATA:

COMPATIBLE COMPATION DATA:

OPERATOR OF COMPATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KUBERASAMPATH, THANGAVEL
TITLE OF INVENTION: NOVEL MORPHOGENIC PROTEIN COMPOSITIONS
OF MATTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
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                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 08/840,510 FILING DATE: 31-MAR-1993 APPLICATION NUMBER: US 08/029,335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 125 HIGH STREET
                    APPLICATION NUMBER:
                                                                                APPLICATION NUMBER: US 07/923,780 FILING DATE: 31-JUL-1992
                                                                                                                                            APPLICATION NUMBER: US 07/946,235
FILING DATE: 16-SEP-1992
APPLICATION NUMBER: US 07/938,336
                                                                                                                                                                                                           APPLICATION NUMBER: US 07/971,091 FILING DATE: 03-NOV-1992
                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 08/402,542 FILING DATE: 13-MAR-1995
                                     APPLICATION NUMBER: US 07/752,857 FILING DATE: 30-AUG-1991
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                                                                                                                             ILING DATE: 28-AUG-1992
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TUCKER, ROMALD F
RUEGER, DAVID C
OPPERMANN, HERMANN
OZKAYNAK, ENGIN
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MBER: US 07/752,764
0-AUG-1991
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Pred. No. 0.18;
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TOPOLOGY: linear

HOLECULE TYPE: DYSOLEAN

SEQUENCE DESCRIPTION: SEQ ID NO: 8:
US-10-122-026-8
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US-10-050-050-23
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                                                 MEDIDIM TYPE Flopy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/10/050,050
FILING DATE: 15-Jan-2002
CLASSIFICATION : UNMBER: US/08/461,113
FILING DATE: 15-Jan-2002
CLASSIFICATION NUMBER: US/08/461,113
FILING DATE: 2-MAY-1995
APPLICATION NUMBER: US 08/445,882
FILING DATE: 2-MAY-1995
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 36,508
REFERENCE/DOCKET NUMBER: CRP-074DV
TELEPRONE: (508) 435-6951
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 138 amino acids

INFORMATION SEQ ID NO: 23:
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Best Local Similarity
Matches 12; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: PATENT ADMINISTRATOR, CREATIVE BIOMOLECULES STREET: 45 SOUTH STREET
CITY: HOPKINTON
STATE: MA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 11-MAR-1991
ATTORNEY/AGENT INFORMATION:
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COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: CAMACHO, JENNIFER A. REGISTRATION NUMBER: 43,526
LENGTH: 399 amino acids TYPE: amino acid TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPPERMANN, HERWANN
PANG, ROY H.L.
OZKAYNAK, ENGIN
SMART, JOHN E.
SNART, JOHN E.
INVENTION: MORPHOGEN TREATMENT FOR LIMITING
PROLIFERATION OF EPITHELIAL CELLS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COHEN, CHARLES M.
CHARETTE, MARC F.
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
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Pred. No. 0.18;
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DESCRIPTION: SEQ ID NO:

23:

OZKAYNAK, ENGIN

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TOPOLOGY: Ilnear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO:
US-10-350-747-2
                                                                                       RESULT 199
US-10-321-799-27
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US-10-050-050-23
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Sequence 27, Application US/10321799
Publication No. US20030224996A1
PUBLICANTION:
GENERAL INFORMATION:
APPLICANT: OPPERMANN, HERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Application US/10350747
Publication No. US20030153072A1
GENERAL INFORMATION:
APPLICANT: Hogan, Brigid L.M.
TITLE OF INVENTION: Compositions and Methods of Making
                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                              Query Match
Best Local
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Best Local Similarity
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INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/808,346
FILING DATE: 28-FEB-1997
ATTORNEY/AGENT INFORMATION:
NAME: Leary Ph.D., Kathryn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 19103-2398
COMPUTER REALABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Pateentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 36,317
REFERENCE/DOCKET NUMBER: 98:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-567-2020
TELEPAX: 215-567-2991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                        354 MKPDVVPKACCAPTKLSATS 373
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12; Conserva
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/10/350,747 FILING DATE: 24-Jan-2003 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Panitch Schwarze Jacobs & Nadel, P.C. STREET: 1601 Market Street, 36th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ENGTH: 399 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TY: Philadelphia
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Pred. No. 0.
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Pred. No. 0.18;
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    INFORMATION FOR
                                                                                                                         APPLICATION NUMBER: US 07/422,613
FILING DATE: 17-OCT-1989
APPLICATION NUMBER: US 07/422,623
FILING DATE: 17-OCT-1989
ATTORNEY/AGENT INFORMATION:
NAME: DIANA M. STEEL
REGISTRATION NUMBER: 43,153
REFERENCE/DOCKET NUMBER: STI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/248-7000
TELEPAX: 617/248-7100
RMATION FOR SEQ ID NO: 27:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/321,799
EILING DATE: 17-Dec-2002
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Flopp
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ADDRESSEE: TESTA, HURWITZ & THIBEAULT
STREET: 125 HIGH STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: OSTEOGENIC DEVICES NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 09/148,925
FILING DATE: 8-SEP-1998
APPLICATION NUMBER: US 08/449,699
FILING DATE: 24-WAY-1995
APPLICATION NUMBER: US 08/147,023
FILING DATE: 1-NOV-1993
APPLICATION NUMBER: US 07/841,646
FILING DATE: 21-FEB-1992
APPLICATION NUMBER: US 07/827,052
FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 07/579,865
FILING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
FILING DATE: 7-SEP-1990
APPLICATION NUMBER: US 07/621,849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/810,560
FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-AUG-1990
APPLICATION NUMBER: US 07/600,024
FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/599,543
FILING DATE: 18-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/621,988
FILING DATE: 4-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                                                                     FILING DATE: 22-FEB-1991
APPLICATION NUMBER: US 0
FILING DATE: 17-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 07/179,406
FILING DATE: 08-APR-1988
APPLICATION NUMBER: US 07/232,630
FILING DATE: 15-AUG-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 07/616,374
FILING DATE: 21-NOV-1990
APPLICATION NUMBER: US 07/483,913
FILING DATE: 22-FEB-1990
                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 0
FILING DATE: 23-FEB-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: U.S.A.
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                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 07/660,162
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RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ROY H.L
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                                                                                     STK-001CP6C3
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; MOLECULE TYPE: protein ; SEQUENCE DESCRIPTION: SEQ ID NO: 27: US-10-321-799-27
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US-10-428-997A-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 27, Application US/10428997A Publication No. US20040077546A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 12; Conserv
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TITLE OF INVENTION: OSTEOGENIC DEVICES
NUMBER OF SEQUENCES: 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: OPPERMANN, HERMANN
OZKAYNAK, ENGIN
KUBERASAMPATH, THANGAVEL
RUEGER, DAVID C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/10/428,997A FILING DATE: 02-May-2003 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: MASSACHUSETTS COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 08/957,425
FILING DATE: 24-OCT-1997
APPLICATION NUMBER: US 08/447,570
FILING DATE: 23-MAY-1995
APPLICATION NUMBER: US 08/147,023
                             FILING DATE: 20-AUG-1990
APPLICATION NUMBER: US 07/600,024
FILING DATE: 18-OCT-1990
APPLICATION NUMBER: US 07/599,543
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                                                                                                FILING DATE: 20-DEC-1991
APPLICATION NUMBER: US 07/569,920
FILING DATE: 20-AUG-1990
                                                                                                                                                       FILING DATE: 4-DEC-1990
APPLICATION NUMBER: US 07/810,560
                                                                                                                                                                                                 APPLICATION NUMBER: US 07/621,988
                                                                                                                                                                                                                  APPLICATION NUMBER: US 07/621,849
                                                                                                                                                                                                                                                                             FILING DATE: 28-JAN-1992
APPLICATION NUMBER: US 07/579,865
                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/827,052
                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 07/841,646 FILING DATE: 21-FEB-1992
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                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                           LING DATE: 1-NOV-1993
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125 HIGH STREET
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: 18-OCT-1990
NUMBER: US 07/616,374
                                                                                                                                                                                                                                                              7-SEP-1990
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Pred. No. 0.18;
4; Mismatches 4
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TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
US-10-428-997A-27
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                                                     Query Match
Best Local Similarity
Matches 12; Conserve
                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO: 27:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 07/422,613
APPLICATION NUMBER: US 07/422,623
APPLICATION NUMBER: US 07/422,623
APPLICATION NUMBER: US 07/422,623
APPLICATION NUMBER: US 07/422,623
APPLICATION THORNATION:
NAME: BRIAN FAIRCHILD
REGISTRATION NUMBER: 48,645
REFERENCE/DOCKET NUMBER: STK-015C1
TELEPHONE: 617/248-7000
TELEPHONE: 617/248-7000
TELEPAX: 611/248-7100
354 MKPDVVPKACCAPTKLSATS 373
                     1 INPETVPKPCCAPTQLNAIS 20 : |: || | | | | | | | |
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 22-FEB-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 07/660,162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 07/315,342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 07/179,406 FILING DATE: 08-APR-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 23-FEB-1989
                                                                                                                                                                                                                                         ENGTH: 399 amino acids
                                                                          Conservative
                                                                                        64.9%;
                                                                          4.
                                                                        Score 72; DB pred. No. 0.18 4; Mismatches
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                                                                                                                                                                       27:
                                                                                                                DB 15;
                                                                                              .18;
                                                                            4.
                                                                                                            Length 399;
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                                                                          0;
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Search completed: October 26, 2004, 07:52:17 Job time : 50 secs